

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1882.—VOL. XLI.

London, Saturday, September 16, 1871.

WITH FIVEPENCE.
(SUPPLEMENT) { PRICE PER ANNUM, BY POST, £1 4s

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
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(ESTABLISHED 1842.)

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10 East Lovell, £12½.
10 Russia Copper, £9½.
15 Asheton, £12½. 9d.
15 Great Laxey, £16½.
50 Anglo-Austral, fully paid, 17s. 6d.
50 Bog, £2½.
21 Bronfod, £2 8s. 9d.
21 Birdseye Creek, £2.
50 Chancot, £2 fully paid, £2½.
100 Chancot, £2.
25 Marke Valley, £2½.
25 North Crofty, £2½.
50 No. Laxey, 18s. 9d.
25 Harlech, £2 6s. 6d.
50 Tankerville, £2 6s. 6d.
50 North Trexkerby, 5s.
50 Old Batholes, 2s.
50 Prince of Wales, 18s. 9d.
15 East Caradon, 2s 1s 3d.
25 Drake Walls, 17s.
20 Don Pedro, £3 1s.
2 Devon Gr. Consols, 2s.
15 East Caradon, 2s 1s 3d.
25 Prince of Wales, 18s. 9d.
50 Perkins Beach, 3s.
50 Rhydtallog, fully pd., £2.
10 Russia Copper, £9½.
10 Rom. Grav., £10½.
15 Tankerville, £16½.
50 Newquay, 8s. 6d.
10 South Aurora, £3½.
15 So. Condurrow, £9 18s. 9d.
70 Rom. Grav., £10½.
15 Tankerville, £16½.
50 Newquay, 8s. 6d.
10 West Aurora, £3 1s 6d.
15 West Condurrow, £10.
50 Wheal Arthur, 3s.
50 Yudanamutana, £10.
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W. H. B. transacts business in every description of shares at the best market prices, and free of commission.

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MMR. WILLIAM SEWARD, STOCK AND MINING SHAREBROKER, 19, THROGMORTON STREET, LONDON, E.C.
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50 Almada, 20s. 9d.
10 Asheton, £4 12s.
50 Aberdaunant.
30 Anglo-Braz., 8s 9d. 10 Great Laxey, 18s. 9d.
40 Bog, £2 12s.
25 Bronfod, £2 12s.
25 Drake Walls, 15s.
50 Cathedral.
1 Carn Brea, £14.
2 Cook's Kitchen, £21 3s.
25 Caldbeck Fells, 25s.
1 Drake Walls, 15s.
1 Dolcoath, £18 3s.
2 Don Pedro, £2 12s 9d.
5 East Lovell, £2 12s.
1 East Pool, £1 12s.
10 East Van, £1 12s.
25 E. Grenville, £2 3s 9d.
10 Eclipse, 1s. 6d. prem.
5 Eberhardt, £2 7s. 9d.
10 Great Vor, £1 12s. 6d.
10 Excelsior, 4s.
20 Frank Mills, 21s.
W. M. and Co. have business in East Llanguyng, Wheal Uny, Thornhill Reef, Sierra Butte, and Terras Tin shares, at close dealing prices.

Utah and South Condurrow shares strongly recommended for a speedy rise.

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50 No. Roman Gravels, 2s 6s.
25 Bog, £2 12s.
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50 East Rhydtallog.
15 Pennerley, £4.
40 West Jewell.
20 North Crofty.
10 Great Ryalton.
50 Tankerville, £2 12s 3d.
50 Terras Tin, £2 12s.
50 Wheal Uny, £8 12s.
100 East Terras, 20s.

East Llanguyng LEAD MINING COMPANY (Limited).—Mr. HENRY MANSELL strongly recommends the immediate purchase of these shares for a great advance in price. A detailed report on application; and specimens of the ore just brought from the mine can be seen at the above address.

GREAT VOR, SOUTH CONDURROW, and WEST CARADON shares are also safe to buy at present quotations.

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Daily List of Latest Prices sent free on application.

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WE ST. CARADON MINE.—Particulars of the recent discoveries at this mine will be found in PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," No. 652, of Friday, Sept. 15, 1871. Price 6d. each, forwarded on application.

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Bankers: The Alliance Bank, and Union Bank of London.

TANKERVILLE—ROMAN GRAVELS.—PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," No. 652, of Friday, Sept. 15, contains the latest particulars of the above, and also of the LEADING COPPER and TIN MINES of CORNWALL.

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MMR. E. J. BARTLETT, STOCK AND SHAREDEALER, NO. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.

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10 Brynamor, fully pd., 2s. 6d.
25 Cashwell, ex div., £3
25 Drake Walls, 17s.
10 East Basser, £6 12s.
10 East Llanguyng.
50 East Lovell, £2 5s.
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10 Russia Copper, £9½.
15 Asheton, £12½.
15 Great Laxey, £16½.
50 No. Laxey, 18s. 9d.
25 Harlech, £2 6s. 6d.
50 Tankerville, £2 6s. 6d.
50 Sweetland Ck., £3 18s. 9d.
5 St. John del Rey, £3 12s 12½.
15 So. Condurrow, £9 18s. 9d.
10 South Aurora, £3 12s 12½.
15 So. Condurrow, £9 18s. 9d.
70 Rom. Grav., £10½.
15 Tankerville, £16½.
50 Newquay, 8s. 6d.
10 West Aurora, £3 12s 12½.
15 West Condurrow, £10.
50 Wheal Arthur, 3s.
50 Yudanamutana, £10.
15 Wh. Grenville, £7 1s.
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Bankers: City Bank.

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References exchanged when required.

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By Order, E. BREWIS, Secretary.

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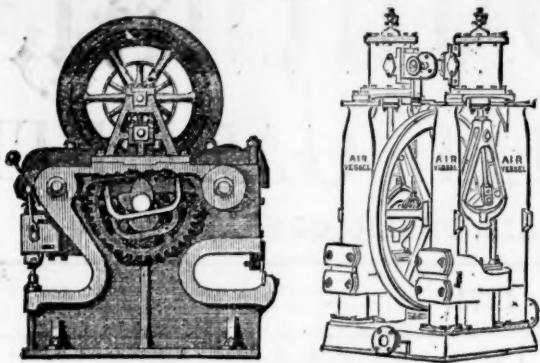
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THOMAS DICKER, Secretary.

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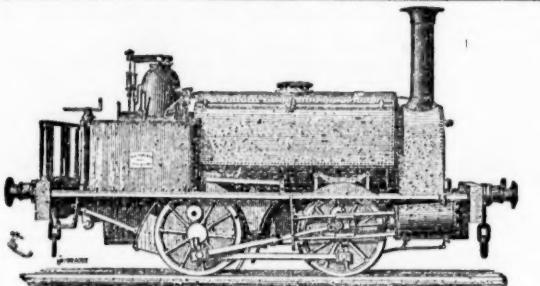
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4.—Of the District including East Wheal Lovell, Lovell Consols, North Lovell, &c., and neighbouring mines.

5.—Of the District including Penhalls, Wheal Kitty (St. Agnes), Polbreen Great West Chilverton, and other mines.

6.—The Minera Lead Mining District of North Wales.

ALL THE MAPS are by the well-known mine surveyor, R. SYMONS, of TRURO, and none of them have been used.

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MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, and every DESCRIPTION OF IRONWORK.

Passenger carriages and wagons built, either for cash or for payment, over a period of years.

RAILWAY WAGONS FOR HIRE.

CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.

LONDON OFFICES,—7, GREAT WINCHESTER STREET BUILDINGS.

STAFFORDSHIRE WHEEL AND AXLE COMPANY (LIMITED), MANUFACTURERS OF RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK used in the CONSTRUCTION of RAILWAY ROLLING STOCK.

OFFICES AND WORKS, HEATH STREET SOUTH, SPRING HILL, BIRMINGHAM.

THE BIRMINGHAM WAGON COMPANY (LIMITED) MANUFACTURE RAILWAY WAGONS OF EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed especially for shipping purposes. Wagons in working order maintained by contract.

EDMUND FOWLER, SEC.

WAGON WORKS,—SMETHWICK, BIRMINGHAM.

** Loans received on Debenture; particulars on application.

JOHN HORSLEY

IRON AND METAL AGENT,

ST. ANN'S SQUARE, MANCHESTER.

PERMANENT CONTRACTORS, and COLLIERIES RAILS, in STEEL or IRON.

Wrought-Iron or Steel Weldless Locomotive Carriage and Wagon Tyres.

Ron and Steel Straight and Cranked Axles, Wheels and Axles, Railway Fish Plates, Bolts and Nuts, Spikes, Cranes, Jacks, Rivets, Hurdles, and Chains.

Black or Galvanized Telegraph Wires, Fencing Wire, BLACK, OILED, and GALVANISED CORRUGATED SHEETS.

Gated Iron Joints, Wrought-Iron Girders, Roofs, Bridges, Tanks, Boilers, Boat Girder, Tank Bridge and Boiler Plates.

Angle, Tee, and Girder Iron.—Nail Rods, Tin Plates, Hops, Sheets, Lead, Copper, Tin, Zinc, and Specie.

Hot and Cold Blast Pig Iron, &c., &c.

BARKER'S IMPROVED PATENT FUEL (FROM COAL DUST).

PROTECTED BY ROYAL LETTERS PATENT.

This FUEL, made from dust coal, GIVES IN USE RESULTS SUPERIOR TO THE BEST COAL. It is thoroughly waterproof, stacks without liability to spontaneous combustion, loss, or deterioration on board ship, or in any climate, and in 50 per cent. less space than coal.

It burns with little smoke, forming itself into coke; it is very durable, the combustion is perfect, and it will not fall or disintegrate in great heat before a blast or strong draught, nor does it produce cinder.

It will bear rough usage and handling, without breakage.

As regards the manufacture, it is easily and cheaply made; the machinery required is simple, effective, and comparatively inexpensive. No heavy pressure required, or exposure to heat, after moulding to dry or coke (as is usual); and after mixing the blocks could, if desired, be made up by hand labour; but for large production self-acting machinery is recommended, and when moulded the fuel is at once ready for use or transit.

Registration of New Companies.

The following joint-stock companies have been registered:-

MINERAL ESTATES COMPANY (Limited).-This is a small company (registered with a capital of 8000*l.*, in as many shares of 1*l.* each), for acquiring and disposing of all kinds of mining property. In addition to the working of mines, the company is empowered to purchase and sell shares in mining companies, and also to transact the business of mining agents generally. The company is registered without special Articles of Association, and, therefore, falls under Table A of the Act of 1862. The subscribers to the Memorandum are, therefore, the first directors. These each take one share in the concern, as follows:-F. C. Fowler, 10; Thomas-road, South Lambeth; Luke Williams, 4; Langham-place, Regent's-park; C. R. Cole, 236, King's-road, Chelsea; C. F. Long, 5, New Bond-street; C. Ohlsen, 34, Woburn-place; C. W. Gordon, 309, Kennington-road; J. D. King, 6, Ridgway-road, Brixton.

FAIR OAK COLLIERY COMPANY (Limited).-This is a company formed for acquiring and working colliery lands at Cannock Chase, Stafford, and Rugeley, under leases from the Marquis of Anglesey. The capital is 200,000*l.*, in 2000 shares of 100*l.* each. The promoters are-J. S. Clay, Branston Hall, Burton-on-Trent, 60 shares; Richard Ratcliffe, Walton Hall, Burton-on-Trent, 60 shares; Henry Evans, Darley Abbey, Derby, 20 shares; Robert Ratcliffe, Scalpiff House, Burton-on-Trent, 60 shares; John N. Hall, Lyncoft House, Lichfield, 25 shares; Joseph Moore, Longlands, Stourbridge, 25 shares; H. B. Jennings, Burton-on-Trent, 20 shares; W. H. Moore, Hagley-road, 25 shares; William Arden Longcroft, Burton-on-Trent, 25 shares.

INDEPENDENCE GOLD MINING COMPANY (Limited).-Capital 120,000*l.*, in 24,000 shares of 5*l.* each. This is an undertaking to purchase and work the Independence Gold Quartz Mine, in the Sierra Buttes Mountain, Sierra County, California. The subscribers are-J. H. Renton, Muswell Hill, N., 100 shares; James Shepherd, 21, Queen's-gardens, Hyde-park, W., 100 shares; J. Edmund Smith, 43, Gloucester-place, Portman-square, W., 100 shares; D. Cornfoot, Aliss-park Villa, Twickenham, 10 shares; J. Elmslie, 27, Leadenhall-street, E.C, 10 shares; E. Smith, jun., 18, James-street, Buckingham-gate, 50 shares; E. Flunier, 3, Shorter's-court, 50 shares. The first three are directors, "with power to add."

RAVENHEAD COLLIERY COMPANY (Limited).-Capital 100,000*l.*, in 1000 shares of 100*l.* each. This is a company formed to take off and work the collieries of Messrs. Bromilow, Haddock, and Co., at Sutton and Parr, in Lancashire; as also the saltworks belonging to them and situated at Winsford, Chester. The subscribers (who are also the company's directors) are-D. Bromilow, Woburn, Bedfordshire; H. G. Bromilow, Morton Bank, Southport; Edward Turner, 1, Seymour-street, Portman-square; H. J. Whitley, Home House, Biggleswade; David Gamble, Windlehurst, St. Helen's, Lancashire; G. W. Baker, Old Castle-buildings, Liverpool; James Haddock, Wink Cottages, St. Helen's.

MENZENBERG MINING COMPANY (Limited).-This company is established to acquire and work the Menzenberg Mine, in Germany, not far from St. Josephberg and Marienberg Copper Mines, and near the railway station of Honnef. The capital is 63,000*l.*, in 12,000 shares of 5*l.* 5*s.* each. The directors are-John Bird, Wynneway House, Fulham; Richard Courtenay, Beech-croft, Sevenoaks; Eli Lees, Werneth-park, Oldham; W. W. Frole, 11, Blomfield-terrace, Westbourne-terrace; George Williamson, 2, East India Avenue; Major German, Vine-court, Sevenoaks; T. Dickins, Broughton Park, Manchester.

GOVERNMENT STOCK INVESTMENT COMPANY (Limited).-Capital 1,000,000*l.*, in 50,000 shares of 20*l.* each. This is a finance company, which has among its objects the receiving of money on deposit at interest (said interest to be represented by coupons), the investment of the share capital as paid up in such wise that not more than one-tenth be invested in any one stock, and the formation and working of Trusts similar to the Foreign and Colonial Government Trust. The subscribers are-Alfred B. Bumpus, 1, Courtland-terrace, Merthyr Tydfil; Thomas L. Wilson, 56, Carter-lane, City; H. W. Bateman, 6, Nunhead-crescent, Peckham; F. Holmes, 10, New Cross-road; Hale, 46, Thorn-road; H. L. Holderness, 112, Brompton-road; Thomas Stock, Victoria-road, Peckham.

REDINGTON QUICKSILVER COMPANY (Limited).-Capital 220,000*l.*, in 22,000 shares of 10*l.* each. This is a new enterprise, which intends purchasing the quicksilver mines of the company known by the same name, and carrying on operations in California. The promoters, who take a substantial interest in the concern (100 shares each), are-Chas. Hale, 8, Cophill-court; John S. Rivolta, 1, East India Avenue; J. H. Green, Weighton-road, Southwark; G. Dibley, 13, King Henry's-road, South Hampstead; Thomas Percival, Reform Club; A. Briske, Stock Exchange; and J. E. Smith, 3, Shorter's-court.

SCARBOROUGH SUB-TRAMWAY, AQUARIUM, AND IMPROVEMENT COMPANY (Limited).-Nominal capital 35,000*l.*, in 5*l.* shares. This is a local company, for the purpose of improving the town of Scarborough, by constructing a subway from the South Sands to North Bay, providing baths, marine aquaria, &c. The promoters are-W. P. Cooke, 15, Belle Vue-terrace, Scarborough, 40 shares; R. Foster, Newton-street, Scarborough, 40 shares; James Kirby, Belle Vue-terrace, Scarborough, 40 shares; J. Williamson, Crown Hotel, Scarborough, 40 shares; John Leckenby, Scarborough, 10 shares; T. M. Crosby, Newbon-street, Scarborough, 5 shares; and W. H. Sanders, 3, Mincing-lane, 40 shares.

KANSAS MINING COMPANY (Limited).-This association is for acquiring and working mines in the county of Gilpin, Colorado. The nominal capital is 55,000*l.*, in 11,000 shares, of 5*l.* each. The directors are C. J. Furlinger, 31, Throgmorton-street; W. Gundry, 75, Old Broad-street; John Hesselton, 9, Warnford-court; Robert P. Holderness, St. Michael's House, Cornhill; H. W. Lindow, 11, Cromwell-road; W. G. Margetts, 7, Warnford-court; W. N. Rudge, 9, St. James's-street.

BOWESFIELD IRON COMPANY (Limited).-The object for which this company is established is to buy off the Bowesfield Ironworks, at Stockton-on-Tees, and to work the same. The capital proposed as the basis of operations is 30,000*l.*, in 300 shares, of 100*l.* each, and the following gentlemen constitute the directorate of this undertaking:-Messrs. R. M. Jaques, Easby Abbey, Richmond, Yorkshire; J. P. Joseph Richardson, Woodlands, Stockton-on-Tees; J. P. Stevenson, Park End, Ormesby; William Godley, Stockton-on-Tees.

WATSON BROTHERS, MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

SATURDAY.-Market rather quiet. Utah, Carn Brea, and West Frances, 6*s.* to 7*s.*; East Van, 12*s.* to 17*s.*; Carn Brea, 14*s.* to 20*s.*; West Frances, 6*s.* to 7*s.*; South Frances, 6*s.* to 52*s.*; Grenville, 6*s.* to 7*s.*; Pacific, 4*s.* to 5*s.*
MONDAY.-Market very quiet, and prices almost nominal. Roman Gravels, 6*s.* to 10*s.*; South Conduffor, 9*s.* to 9*s.*; Van, 6*s.* to 5*s.*; West Chiverton, 15*s.* to 20*s.*; Cook's Kitchen, 2*s.* to 2*s.*; Pennerley, 2*s.* to 3*s.*; West Caradon, 2*s.* to 3*s.*; Tincroft, 2*s.* to 3*s.*; New Lovell, 2*s.* to 2*s.*; East Lovell, 12*s.* to 12*s.*; Great Laxey, 10*s.* to 10*s.*; West Bassett, 4*s.* to 5*s.*; West Tankerville, 8*s.* to 8*s.*; Eberhardt, 8*s.* to 8*s.*
TUESDAY.-Market firm. Cook's Kitchen, Carn Brea, South Crofty, Tin-brook, South Conduffor, and Utal, chiefly dead in. Cook's Kitchen, 3*s.* to 32*s.*; South Frances, 1*s.* to 2*s.*; Grenville, 7*s.* to 7*s.*; Tincroft, 4*s.* to 5*s.*; New Lovell, 2*s.* to 2*s.*; East Lovell, 12*s.* to 12*s.*; Great Laxey, 10*s.* to 10*s.*; West Bassett, 4*s.* to 5*s.*; West Tankerville, 8*s.* to 8*s.*; Eberhardt, 8*s.* to 8*s.*
WEDNESDAY.-Market quiet. Dealers busy with the settlement. Eberhardt, 8*s.* to 8*s.*; South Crofty, 2*s.* to 2*s.*; Roman Gravels, 1*s.* to 1*s.*; Cook's Kitchen, 3*s.* to 32*s.*; South Frances, 1*s.* to 2*s.*; Grenville, 7*s.* to 7*s.*; Tincroft, 4*s.* to 5*s.*; New Lovell, 2*s.* to 2*s.*; East Lovell, 12*s.* to 12*s.*; Great Laxey, 10*s.* to 10*s.*; West Bassett, 4*s.* to 5*s.*; West Tankerville, 8*s.* to 8*s.*; Eberhardt, 8*s.* to 8*s.*
THURSDAY.-Settling-f-day. Market moderately active, and a fair business. Chontales, Utal, Eberhardt, West Tankerville, Cook's Kitchen, and Utal, chiefly dead in. Cook's Kitchen, 3*s.* to 32*s.*; South Frances, 1*s.* to 2*s.*; Grenville, 7*s.* to 7*s.*; Tincroft, 4*s.* to 5*s.*; New Lovell, 2*s.* to 2*s.*; East Lovell, 12*s.* to 12*s.*; Great Laxey, 10*s.* to 10*s.*; West Bassett, 4*s.* to 5*s.*; West Tankerville, 8*s.* to 8*s.*; Eberhardt, 8*s.* to 8*s.*
FRIDAY.-There is more activity in the market to-day, and prices generally improved. Polcouth, 18*s.* to 18*s.*; Carn Brea, 14*s.* to 14*s.*; Tincroft, 4*s.* to 5*s.*; New Lovell, 2*s.* to 2*s.*; Great Laxey, 10*s.* to 10*s.*; West Bassett, 4*s.* to 5*s.*; West Tankerville, 8*s.* to 8*s.*; Eberhardt, 8*s.* to 8*s.*
SATURDAY.-There is more activity in the market to-day, and prices generally improved. Polcouth, 18*s.* to 18*s.*; Carn Brea, 14*s.* to 14*s.*; Tincroft, 4*s.* to 5*s.*; New Lovell, 2*s.* to 2*s.*; Great Laxey, 10*s.* to 10*s.*; West Bassett, 4*s.* to 5*s.*; West Tankerville, 8*s.* to 8*s.*; Eberhardt, 8*s.* to 8*s.*

2*s.* to 2*s.*; West Chiverton, 17*s.* to 18*s.*; Gwydyr Park, 17*s.* to 22*s.*; Devon Consols, 25*s.* to 10*s.*; Eberhardt, 37*s.* to 38*s.*; East Lovell, 12*s.* to 13*s.*; Roman Gravels, 19*s.* to 20*s.*; Grenville, 7*s.* to 7*s.*; Taquaril, 7*s.* to 9*s.*; Pacific, 4*s.* to 5*s.*

Original Correspondence.

WEST CHIVERTON, AND THE "WEST BRITON."

SIR.-Some weeks ago I called the attention of your readers to the singular manner in which West Chiverton had been singled out by a writer in the *West Briton* for adverse criticism, particularly in reference to the state of its accounts; and I ventured to observe (what I still repeat) that the accounts of that mine were in a far better position than those of any other dividend mine in Cornwall; and while, therefore, it was thus singled out for such hostile attacks, other companies which constantly received the favourable notice of the *West Briton* were notoriously paying dividends when heavily in debt, and, consequently, from money borrowed from their bankers.

At the last meeting of West Chiverton, held in June, the accounts, charging the costs to March, showed a balance in hand amounting to 12,249*l.* 4*s.* 5*d.*, and out of this a dividend of 3000*l.* was paid, leaving 9249*l.* 4*s.* 5*d.* in hand. Now, supposing the costs were in reality two months behind, that would make 6000*l.*, which deducted from the 9249*l.* 4*s.* 5*d.* would still leave a credit of 3249*l.* 4*s.* 5*d.*, with costs charged up to the meeting.

Let me now turn to Tincroft, which receives some very friendly parts from the *West Briton* this week. Credit is taken for the tin up to the meeting on the 31st ult.-203 tons, for 16,522*l.* The costs (6000*l.*) for three months were charged up to June only, and deducting these from the tin sold left a balance on paper of 11,336*l.* Out of this the dividend and bonus (10,500*l.*) were declared, leaving 836*l.* to credit. But what were the real facts ignored by the *West Briton*, which states "the balance sheet showed they had 9849*l.* at the bankers." The costs were only charged to June, and the costs for July and August were liabilities, and that of the former month, at least 2000*l.*, must have been paid, and how?

In my former letter, when I instanced mines well known to the *West Briton* as really paying dividends from borrowed money, and not from profits, such as South Conduffor, West Frances, and Cook's Kitchen, and stated that these passed off without comment from that paper, whilst West Chiverton, with a large balance in hand, was singled out for unfair criticism, the *West Briton* replied that two blacks did not make a white. True, and I only mentioned them then, as I do Tincroft now, to show the personal animus of a writer who is doing his best to disgust, not alone the shareholders in West Chiverton, but the general public with Cornish mining.

West Chiverton, upon an outlay of 30,000*l.*, has in eight years paid the shareholders in dividends 150,000*l.*, and I trust will continue to pay good profits for many years to come. In the meantime, some 300 shareholders in the mine have seen their property brought down in market value nearly 100,000*l.*, and solely through these attacks. The *West Briton* goes upon the old adage, "throw dirt enough, and some of it will stick," and there are always plenty of people willing enough to believe any evil of mining. The fall in shares this week has been caused by the publication in a London Circular of the very worst of the *West Briton*'s tirades, and this Circular gives them as the result of an investigation made by the editor of the *West Briton*. But I will not believe the editor is so ignorant as to suppose that the soft lead lode of East Wheal Rose (in which there was a run, caused by a water-sput breaking over the shaft and drowning 40 men) bears any analogy to the hard lode of West Chiverton; why, then, is such a damaging comparison made? Why are we told that such a "run" might occur at West Chiverton except, for some purpose, to frighten the shareholders out of their property? A run might occur in any mine in Cornwall, and in scores more likely than at West Chiverton. There may be an earthquake to-morrow, but it is not probable.

Sept. 9. ARGUS.

PROFITABLE INVESTMENTS.

SIR.-It is some sign of the confidence in mining when no cash is required for payment of an acknowledged valuable property. Not only does this prove goodness, but it allays all fears for the future, since the vendors rely solely upon profitable returns from a moderate expenditure for steam stamping power. I allude to the East Bottles Hill Mining Company (Limited). Many years' labour and anxious expectation as to the future have been endured by a patient proprietor, and thousand after thousand of pounds have been spent in developing what is now one of the greatest successes of past years, and the greatest coming one for 1872. Not one lode alone has been cut and driven on, and shafts sunk considerable distances apart, but six distinct lodes have been cut and proved, from actual discoveries. It has now become absolutely necessary to erect powerful machinery to crush the large quantity of tin-staff ready at once to be operated upon. No great scientific knowledge is needed to prove that a sharp blow does a greater amount of work than a slow crushing blow. Morrison swiftly welded iron with a steam-hammer, and there seems to be no reason why a stamp striking 15*s.* blow a man should not be employed in breaking the tin ore. Such a stamp might knock into powder 20*s.* tons of mineral a-day, or 120 tons for six stamps, which operating on a ton of low-grade would yield 1*s.* 6*d.* or 2 tons of tin daily, or (say) 3*s.* tons of tin per month. The peculiar situation of the mine renders it out of the easiest to work mines in Devon or Cornwall, the hill rising 70 fathoms, so the expense of returning the tin would be low. I perceive the adjoining mine to East Bottles Hill has just declared a dividend of 7*s.* 6*d.* per share.

Too many companies throw away money in buildings and surface elaborations, leaving the mine exploring part of the business to follow; but East Bottles Hill, like the Van, goes to work underground, first finding its riches, and ultimately takes means to erect the required machinery; and, though the shares are now at small premium, consequent upon success, the Yorkshiremen, following the brilliant Neufchâtel Bituminous Rock Company's rapid rise, whose shares, with 10*s.* paid, are 7*s.* each, have the chance in their hands to improve their means equally as much with East Bottles Hill as with Neufchâtel. There can be no doubt that a very prosperous new year and rattling dividends await the enterprising shareholders in the East Bottles Hill Mining Company (Limited), and a short time may see shares 3*s.* 4*s.* each.

A NEUFCHATEL INVESTIGATOR.

BORING BY MACHINERY.

SIR.-No one is more anxious than myself to see this long-contested apparatus (the Boring Machine) brought to a successful issue, and no one more anxious to see the results of the trial of the truth. One writer last week goes on to say that he shall at an early date be able to give your readers a few particulars on the capabilities of the Drill, which he believes will far exceed anything that can be done by manual labour.

Why did not your correspondent give us the history of his four weeks' trial? His failing to do so and his endeavour to prop up the hopes of the company or the inventor call forth these remarks:-

1.-The machine was worked in the shaft about four weeks, and the foreman had twenty men each day to assist him. Within that time the shaft was sunk about 3 feet, and I am informed that the bottom of the shaft is like the bottom of a sinking wind-bore, and equally perforated.

2.-These same twenty men sunk the shaft without the drill the previous month about the same number of yards. I cannot, therefore, imagine how your correspondent can say he believes it will exceed "anything that can be done by manual labour."

3.-On what ground could he hope to give your readers an early history of its capabilities when some days previous to the date of his letter he had discharged the whole of the men and locked up the machine in the store-room, where it now remains? - Sept. 13. OBSERVER.

VIRTUOUS LADY AND QUEEN MINES.

SIR.-As "another shareholder" in the mines, will you allow me a few words? The gentleman writing from Kettering accuses us of ignorance in regard to the amalgamation process, but he forgets that if the Queen managers, or their agents, assert, as they have done, that they have discovered and patented a new method how should we know much of what is their secret? Moreover, everybody is not a chemist, and the chances are that very few of the body of the shareholders would care to express an opinion on the process. For my own part, I await results, and by results I do not mean 1000 or 2000 ozs., or its money equivalent of 300*l.* or 500*l.*, which is but a small produce for four or five months, and may after all, perhaps, be only the produce or a "bunch" of more than average quality. The real question is, can the low class ores (there being but very small quantities of the better classes) be supplied and treated in large quantities at a profit? And it seems to me nothing but results can decide this point, until we are really in the dark, notwithstanding any amount of assertion to the contrary, whether from Mr. Barnard or his agents. As to the amalgamation process itself, the smelters of this country must have had it, or something very like it, a long time in operation, and they assert that it cannot be applied with profit to ores containing less than a certain number of ounces to the ton. I had heard of bunches of silver in the Queen district before, which had deceived the buyers of shares with illusory hopes. I know this, but such is the fascination in the very names of silver and gold that I could not withstand the temptation to take an interest in the Queen, whose dreams of permanent profits may, perhaps, prove in the event just as illusory. However, we ought in a few months to be able to see daylight. Mr. Barnard has promised us a dividend at Christmas-the first instalment of the 2*s.* 6*d.* Meanwhile we must rest and be thankful.

While writing this, Mr. Editor, I should like to ask what has become of an eloquent supporter of Mr. Barnard and his mines, who some time back did so much by his letters to the Journal to keep these mines before the public? It was mainly through his cool and lucid letters, rather than those

effusions of the Secretary, that myself and some friends took and increased our interests in the two mines. For some time the writer has been distinguished in the Journal by his silence. For such a vigorous and effective supporter of Mr. Barnard and the Virtuous Lady and Queen Mines this prolonged silence might be construed as somewhat onerous. Let it, therefore, should appear that he has forsaken a falling cause. Let me ask him to give us his opinion now of the properties he so earnestly contributed in "writing up."

A word as to the Virtuous Lady. The shareholder from Kettering asks the Secretary for information this week on three points—the financial condition of the company; the quantity of ore now being produced; and the amount of silver contained in the lode stuff. Information on these points will be equally acceptable to other shareholders, and will, doubtless, be looked eagerly for. Mr. Kettering is evidently a friend to Mr. Barnard, and has given him an opportunity to encourage the shareholders.

ANOTHER SHAREHOLDER.

[For remainder of Original Correspondence see this day's Supplement.]

Meetings of Mining Companies.

VRON UNITED SILVER-LEAD MINING COMPANY.

The annual meeting of the shareholders was held at the mine, on Sept. 9. Lieut. A. B. BROWN, R.A., in the

The door may be adjusted to a separate truck, or it may be set on the oven. The turn-table may be dispensed with, the trams being run direct into the oven, or a turn-table may be conveniently placed between the fronts of two or more opposite ovens. The heat is kept in by building the oven with unusually thick walls, or it may be built with a casing of sand. The iron annealing pans are cast with vertical dovetails, so as to hold a fire-proof coating of clay when it is applied before running them into the oven. Many other forms of roughened surfaces are noticed, but this one is preferred. The same plan is to be applied to the surfaces of the parts of the annealing cases of case-annealing ovens.

SEPARATION OF GOLD AND SILVER WITH PROTO-SULPHATE OF IRON.

For some time past an ingenious and economic process of separating gold and silver, the invention of Dr. F. GUTZKOW, has been in use at the San Francisco Assaying and Refining Company's works, and given highly satisfactory results. Large quantities of sulphate of copper, only saleable with difficulty, being produced by the ordinary process Dr. Gutzkow sought to limit its production. It was found unpractical to substitute sheet iron for the sheet copper in the precipitation, as the copper was, of course, re-precipitated with the silver, but he discovered that the reducing agency of proto-sulphate of iron could be applied to the solution of the sulphate of silver. It is not practicable to work on the large scale with sulphate of iron upon the solution of sulphate of silver in water, and is, therefore, requisite to prepare first crystallised sulphate of silver free from impurities, inclusive of metallic gold, in a finely divided state, sulphate of lead, and other substances insoluble in a solution of proto-sulphate of iron. The pure crystallised sulphate of silver is next acted upon by a hot concentrated solution of the proto-sulphate, and the hot, turbid, thickish fluid resulting is poured into a large size cast-iron cauldron, containing dilute sulphuric acid (1617 sp. gr.), previously heated to 110°, and sufficient water is added to reduce the very concentrated acid silver solution to the same density. After a few minutes rest the liquor will clear, when it is syphoned off into another similar cauldron, capable of being rapidly cooled from the outside. Every hundredweight of silver refined requires 10 cubic feet of the dilute acid.

The addition of the water above referred to serves another purpose besides that already mentioned. Precipitates of sulphate of lead and sulphate of silver are formed, and the latter does not become quite permanent until, first, all the lead which was in solution is precipitated; and, moreover, these heavy precipitates aid to throw down all substances which render the liquid turbid, and especially the gold. Thus a clear liquid, free from lead and gold, is obtained far more rapidly and completely than by the usual method of pouring the very concentrated sulphuric acid silver solution into water.

The liquid having been cooled to 30° or 40° is pumped into the upper cauldron, there to be used again as acid, at 1617 specific gravity.

At the bottom of the cauldron in which the cooling took place the sulphate of silver will be found deposited, forming a hard yellow-coloured crystalline crust, about 2 inch thick, and tolerably free from adhering acid, but at the deepest part of the vessel there is always some strongly acid mother liquor, and this acid is to be again used to dissolve a fresh quantity of silver. The crystalline sulphate of silver is removed from the cauldron by means of iron shovels, and placed on the perforated false bottom of a wooden box, lined inside with lead, and placed on wheels, so as to be removable from place to place; between the two bottoms there is a tap for running off the liquid.

A red powder, consisting chiefly of sulphate of copper, will be found adhering to the crystals. To separate this a very hot and very concentrated aqueous solution of protosulphate of iron is used. The salt of copper is first dissolved, and, therefore, that liquid is run off separately, afterwards to be used for the preparation of sulphate of copper.

When the pure brown colour due to the sulphate of peroxide of iron begins to show itself the solution is run into a large, very shallow vessel, in which, on cooling, the largest portion of the silver salt is decomposed, and some metallic silver is deposited in a spongy state, collected and placed on a filter. The greater portion, however, of the crystalline mass of sulphate of silver which had been placed in the box is converted slowly into a dense coherent mass of metallic silver, and the reduction may be considered complete as soon as the protosulphate of iron solution which runs off has assumed its original green colour. The metallic silver is next washed with pure hot water, then pressed in a hydraulic press, and lastly melted. The sulphate of the peroxide of iron having become sufficiently cool is poured into a lead-lined tank, with scraps of sheet-iron, and is thus re-converted into protosulphate fit for use in a subsequent operation.

The small quantity of silver and copper separated by this last mentioned operation are collected from time to time, and re-treated with a fresh charge. Every hundredweight of silver reduced from the sulphate requires 20 cubic feet of the protosulphate of iron solution.

BREAKING AND CUBING STONE.—An improved machine for this purpose has been invented by Mr. J. R. RIDER, of Melbourne, Australia, in which an oscillatory or vibratory motion is imparted to the upper part of a vertical lever or hammer. This lever is connected to the cam shaft by a pair of pins working in a slot in such lever, the lower end thereof being supported by a pin proceeding from the side of the casing of the machine. On each side of this lever is a jaw with a flange which fits into a groove in the side of the lever. The upper portion of each of these jaws is kept in position by an iron

band. Opposite each of these movable jaws is a fixed jaw attached to each end of the casing, and having flanges proceeding from its upper ends with slots cut in them to permit of their being fastened by wedges. The gauge of stone to be broken is adjusted by the insertion of packing between the e-jaws and the casing. The face of the jaws consists of a series of recesses, and consequently the acting surface of the face of each jaw consists of a series of transverse lines or ridges. Those on the moveable jaw work between those on the fixed ones.

IMPROVED RAILWAY BRAKES.—An oval-shaped boss is, according to the invention of Mr. J. A. BAXTER, of Belfast, keyed to each axle between the wheels, which revolves between two sides of a strong guide frame. A wedge, or wedge-shaped block, is free to travel between the guide frames and oval boss, but when lowered the rotation of the boss and the wheels are stopped. The wedges are connected by chains to a rod running along the carriages and joined couplings with each carriage, and this rod is connected to the piston rod of a steam cylinder, through the wedges are raised or lowered, and the brake power thus put on or taken off; or in some cases the power is applied by a screw lever, or other means.

STEAM-ENGINES.—Messrs. W. R. OSWALD and W. K. SWADDLE Sunderland, cause the water from the condenser to be injected amongst the exhaust steam from the engine, and the water thus heated is led away to be forced into the boiler. The water from the condenser is caused to be pumped up into a cistern or reservoir, and from the bottom of this cistern it is conducted by pipes amongst the exhaust steam of the engines. The inlet to each of these pipes is fitted with a valve, the opening and closing of which is so controlled that a small quantity of water shall always be retained in the cistern. When the valve is raised the vacuum in the exhaust draws water from the cistern, and the water, falling or forced in a shower into the exhaust pipe, is heated by the steam passing from the cylinders. A cistern or reservoir is provided for the heated water to collect in, from which it is led away and pumped into the steam boiler. Provision is made for preventing the spray of water which is injected into the exhaust pipes from being carried over with the steam into the surface condenser. Provision may also be made for causing the water from the condenser to be pumped directly from the condenser to the boiler in case the feed water heater should require repair.

METAL FOUNDERS' BLACKING.—To provide metal founders with a blacking possessing good sleeking and heat-resisting properties, and to enable them to produce castings with smooth skins of desired hues, J. C.SELLARS, Birkenhead, mixes sea weed, sea grass, or sea plants, in any convenient or desired proportion, with still coke, peat charcoal, soft wood charcoal, gas coke, coked coal, oil retort coke, coal dust, soot, hard wood charcoal, or other suitable coke or charcoal, or with lime, chalk, or clay, or with a mixture of two or more of these substances. The sea weed may be added in the newly cut, partially dried, dried, or dried and pulverised state to the coke, charcoal, lime, chalk, or clay, the latter being either in a rough or ground condition. The addition of sea weed to coke, charcoal, lime, chalk, and clay in every proportion, so long as the moisture is insufficient to cause the mixed mass to form a paste in the process of reducing or grinding, or to cause the particles of the blacking when furnished to adhere and form lumps, is beneficial either, first, for improving the quality, or, second, for reducing the cost.

At East Pool Mine meeting, on Monday, the accounts for June and July showed a profit of 1794. 11s. 5d. A dividend of 1600/- (5s. per share) was declared, and 1461. 18s. 6d. carried to the credit of next account. The committee stated that that portion of the expenses and materials for June and July months pertaining to the erection of the new drawing engine, and amounting to 1050/-, including the cost of Wheal Tebidi machinery, &c., had been placed to the suspense account, to be discharged as expressed in the statement of accounts rendered on July 10. [The agents' report is among the Mining Correspondence.]

At Rosewell Hill and Ransom United Mine meeting, held at the mines, on Wednesday, the loss on May, June, and July working was 2602. 1s. 11d. A debit balance of 2002. 0s. 6d.

At Hington Down Consols Mines four-monthly meeting the accounts showed a cash balance in hand of 4107. 1s. 11d.; and an estimated account of payments and receipts before the meeting, to be held in January, 1872, showed an estimated credit balance of 1003. 1s. 3d., with an asset of 1000/-. Capt. James Richards says—During the next four months we shall, from present appearances, be in a position to sell at least 2000t. worth of ore, at a monthly cost of about 230/-; and, in conclusion, I have the satisfaction of congratulating you on the present prosperity of the mine, and the encouraging prospects in view.

At the Great Royalton Mine meeting, on Wednesday (Mr. James Crofts in the chair), the accounts showed a cash balance against the mine of 1381. 18s., and a balance of liabilities over assets of 4261. 94. A call of 2s. per share was made. The sales of tin realised 511. Details in another column.

At the Roche Consols Mine meeting, on Wednesday (Mr. James Crofts in the chair), the accounts showed a balance of liabilities over assets of 4462. A call of 2s. 6d. per share was made. Details in another column.

At the Central City Mining Company meeting, on Tuesday (Mr. Lindow in the chair), it was unanimously resolved to wind-up the company.

At the Ferguson Gold Mining Company pro forma meeting, on Thursday, an adjournment till October was agreed to.

COAL MARKET.—We had 86 fresh arrivals this week. The demand for household coals has been more active, and prices have advanced from 3d. to 6d. per ton. Hartley and manufacturers' coals have remained steady, and without change in prices. Hetton Wallsend, 18s. 9d.; South Hetton Wallsend, 18s. 3d.; Lambton Wallsend, 18s.; Tees Wallsend, 18s.; Harton Wallsend, 15s. 9d.; Hetton Lyon's Wallsend, 15s. 9d.; Hartlepool Wallsend, 17s. 3d.; South Kelso Wallsend, 17s. Unsold, 1 cargo; 10 ships at sea.

BIRTH.—On Sept. 4, Mr. WILLIAM TUXFORD, aged 64, who had been for many years extensively connected with mining, especially in the Isle of Man. His loss will be greatly felt by a large circle of friends, by whom he was highly esteemed.

HOLLOWAY'S OINTMENT AND PILLS—RELIEF AND REMEDY.—It is useless here to enter into the question how this ointment works such astounding cures of all descriptions of sores, ulcers, bad legs, and scrofulous eruptions. Sufficient it is for all sufferers to know that the united testimony of thousands proves the healing powers of Holloway's ointment, and earnestly recommends its trial to all afflicted with these maladies. When this treatment is once commenced, the ease and comfort it bestows will induce its steady continuance till the cure is completed. A vast advantage in using Holloway's widely appreciated medicaments arises from the fact of their requiring neither confluence nor much change of diet to exert their unfailing sanative effects.

BREAKING AND CUBING STONE.—An improved machine for this purpose has been invented by Mr. J. R. RIDER, of Melbourne, Australia, in which an oscillatory or vibratory motion is imparted to the upper part of a vertical lever or hammer. This lever is connected to the cam shaft by a pair of pins working in a slot in such lever, the lower end thereof being supported by a pin proceeding from the side of the casing of the machine. On each side of this lever is a jaw with a flange which fits into a groove in the side of the lever. The upper portion of each of these jaws is kept in position by an iron

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—Wm. Phillips, Sept. 14: The lode in the 103 west has a little improved in the past week, and is now looking very promising. We shall take down the lode in the different other levels, and give a full report next week.

BLAEN CAELAN.—T. Kemp, Sept. 13: I went over this mine yesterday, and beg to hand you the following report.—The 20, west of shaft, is being opened in a large lode; the north, or hanging, side is still carrying a leader of mud; the other portion of the lode is killas and friable spar, strongly spotted with lead ore. I consider the lode at this point as having a very promising appearance, and from indications we ought to cut into a good bunch of lead ore presently. In the 20, east of the shaft, the lode is chiefly composed of killas, intermixed with a little spar, with occasional spots of ore; the ground in this barrow is rather stiff for opening, and the men are making but slow progress—so as to get under the rich run of ore ground gone down from the upper levels. The stope over the 10, to the east of the shaft, is still looking well, and is worth 2 tons of ore per fathom. The stope nearer the shaft, in the back of this level, is worth 15 to 20 cwt. of ore per fathom. The stope in the back of the adit are not looking quite so well, but worth on an average from 18 to 20 cwt. of ore per fathom. No other change. The surface work, including dressing, is being pushed on with all possible energy.

BLUE HILLS.—S. Bennetts, A. Gripe, Sept. 9: In the 66, east of Letcher's, no lode has come since last reported on, nor is there any change to notice in the 30 east. The 13, east of Poulyear, on Wheal Betsy lode, is worth from 2 to 7c. per fm. The winze below this level is down on another slide gossan, which is not yet cut through; this is the fourth heave within 3 fms. The lode in Wheal Joy shaft continues satisfactory, and worth 15c. per fm.

BOG.—Wm. Nancarrow, J. Lean, Sept. 13: There is no change taken place worthy of remark since last report, the various points of operation being in a satisfactory state of progress.

BRONFOLOYD.—Thomas Kemp, Sept. 13: No. 3 Shaft, North Lode: Fair progress is being made in sinking this shaft from the 84 to the 100 fm. level, which will be pushed on with all possible energy. The lode in the 84, to the west of winze, continues to look well, and is yielding fully 2½ tons of ore per cubic fathom. The stope under the 62, and to the west of winze, is worth 2 tons of ore per cubic fathom. The stope over the back of the 62, and to the west of shaft, is worth 2½ tons of ore per fathom. The tribute pitch in the back of the 52 is producing 10 cwt. of ore per cubic fathom. We are getting on fair with levelling the ground west of the bundle floors, and shall commence the wheel-pit for the power to drive the wire tramway on Monday next.

BRYNAMBOR.—G. Sparge, Sept. 13: Since my last we have completed the forking of the water, fixing the balance-bob, &c., and are going on sinking satisfactorily. At the end of ensuing week I expect to commence cross-cutting the lode, and also continue the sinking to the 32 fm. level. The lode in the shaft is improved on the north part, but shall be able to say more as to its value when cross-cut. We shall go on as fast as possible with all points in operation, and will report as soon as anything important occurs.

BUDNICK CONSOLS.—J. Rawlings, Sept. 14: The lode in the 15 is 1 ft. wide, composed of spar and peace, and the ground is better for driving. In the 23 the lode is 2 ft. wide, composed of capel and peach of no great value. Driving east of the footway shaft the lode is 3 ft. wide, with every indication of a bunch of tin near at hand. The tribute ground, on the whole, is looking better, and if we have breakage with the machinery I expect we shall be able to meet the cost this month. We are driving three kindy ends, and if we should cut another bunch of tin similar to those we have had here we shall be in a dividend position at once.

BWADRAIN CONSOLS.—R. Norther, Sept. 11: The lode in the 55 fm. level west is 5 ft. wide, good saving work. The lode in the 45 fm. level west is disordered by cross-measure of unproductive ground. The lode in the 35 is 1 ft. wide, and looking promising for lead ore. I do not see any change in the deep adit level at Dolfawr. The stope throughout the mine will yield about their usual quantities of ore. All the machinery is working well, and we are making good progress in timbering the new shafts.

BWLCH CONSOLS.—R. Norther, Sept. 12: The lode in the rise in the back of the 70 is 4 ft. wide, saving work. The stope in the back of the 70 fm. level are worth on an average 15 cwt. per fathom. The lode in the 60 fm. level is 3 ft. wide, composed of quartz, killas, and a mixture of lead ore. The stope in the back of the 60 fm. level are worth 18 cwt. per fathom. The lode in the 50 fm. level is 3 ft. wide, and worth 10 cwt. per fathom. The stope in the back of the 48 are worth 17 cwt. per fathom. All other points of operation are without change since I last reported.

CAPE CORNWALL.—Richard Pryor, John Davey, Sept. 12: The lode in the 100, driving east and west of the cross-cut, continues much the same as reported on last week. The ground in the 100 cross-cut, driving north of the engine-shaft, is improving in its appearance, and showing indications of becoming more favourable for progress.

CASTLE GATE (Tin).—T. Parkyn, Sept. 14: Since my last report we have cleared the lode still further south, and have found several branches of tin dropping into the lode we first intersected, called Brenton's lode. I should remark here that this lode is 2 ft. wide, containing good work for tin, and the depth is not more than 6 fms. below the surface, and these branches of tin will fall into Brenton's lode about 15 fms. under the adit. I am pushing on the adit still further south as fast as possible, as we have other lodes I want to reach—in fact, there are over 20 lodes in the sett, and from the surface operations considerable quantities of tin must have been raised, and we are now close upon Duck's pool lode. I have put the men to drive around an old shaft to avoid using timber, &c., and I fully expect to reach the lode next week. From what I have already seen of this mine I feel quite confident you have a most valuable mine. The lodes are embedded in killas near the granite, and is in a splendid tin district. By next week I shall be able to say where the best position for the engine, stamps, dressing-floors, &c., should be. I want first to see two or three other lodes, so as to know their size and the course they are taking, &c. I beg to say that good returns of tin can be made here as soon as the stamp-works are set to work, as large quantities of rich tin-stuff will be laid open by this adit, and by sinking 20 fms. below the adit the supply of tin-stuff will be inexhaustible.

CATHDRAL.—J. Michell, Sept. 14: Houston's Tin Lode: We are still driving in as fast as we can in the adit level, east of footway shaft, and the lode maintains its size (7 feet) and character, and producing some good work for tin. In clearing the adit towards Doctor's shaft these last few days we have made much better progress than for some time past, and from present appearances we shall soon make a finish of it, when we shall commence to sink the shaft referred to, and without a doubt very good returns will be made from this point. The masons are getting on very well with the building, and I hope we shall soon put the engine to work.

CONNORRE.—W. Jones, Sept. 13: The 18 fathom level, middle, and south stope are yielding well, the ore of ordinary quality. The ore which we are dressing from the 18 and 25 fm. levels, at Field's shaft, is of a superior description; we are breaking in a large way. There is no change to observe in the stope in the 25 fathom level, at Tracey's shaft. We have now on our surface some tons of the rich grey ore from the 25 fm. level, at Berry's shaft; our work progresses well, and is in profitable ground. The stope in the 35 fm. level continues in a very satisfactory state. We have a strong lode in the drivage in the 45 fm. level; the copper percentage is apparently high. We have been during the past week drawing regularly from the 55 fm. level—a kindly lode—Kilmac Silver Blende Ore: We are still putting down our sink, preparatory to the second stope. We are steadily dispatching to Wicklow for the completion of the present career.

CRENVER AND WHRAL ABRAHAM UNITED.—W. Kitto, Sept. 11: Sturt's Engine-shaft: We shall send down the bob and fix it in its place in the 180 this week. In the 200 end west the lode is the same as last advised.—Crenver Shaft: In the 130 end east the lode is 2 ft. wide, producing saving work to dress. In the rise in back of the 180 the lode is 2½ ft. wide, worth from 15 to 20 cwt. per fm. At Kelly's engine-shaft, sinking below the 220, the sumpmen are leaving the lode standing, and will take it down at the end of the month, to ascertain its value. No alteration in any other part of these mines since last advised.

CWM ERFIN.—Sept. 13: The lode in the stope in bottom of the 45 is on an average 6 ft. wide, and will turn out from 7 to 8 cwt. of lead ore per fathom. The 45 west, on the counter lode, has been suspended for the present, and the men gone to stope in the bargain before mentioned. We have a branch or a part of the lode still going off in a north-west direction; it is about 6 in. wide, but of no value; we believe that it will lead to the same thing cut in the 10 cross-cut, and this being poor at the intersection is the reason of our abandoning it until something better is seen. Good progress has been made in the rise over the back of the 45; the lode in the same is 6 in. wide, composed of spar and a little carbonate of lime, spotted with blonde. In the cross-cut driving south, in the 45, nothing has been seen. In the stope in back of the 45 fm. level, 90 fms. east of the drawing-shaft, the lode will yield on an average about 8 cwt. of lead ore per fathom. In the 32, going west of Taylor's shaft, the lode is 1 ft. wide, composed of killas, sugary-spar, or decomposed quartz, spotted with silver-lead ore—a very kindly end, and might improve at the blast of a hole. It is going back to virgin ground, and parallel with the most productive parts of the Goginan Mine. In stripping down the sides in the bottom of the deep adit level we are meeting with some strong branches of lead ore, and I think the men are earning a fair living in their tributary. There is no alteration in any other part of the mine to remark. The machinery is all in good working order, and a fresh bunch of ore would again set us all right.

DEER PARK.—J. Bucknell, Sept. 14: We are continuing to drive west on the north lode. The ground is very favourable, and we are making good progress. I have dialled the lode that the adit has been driven upon in the adjoining ground, and find that it forms a junction with our lode that has been opened upon in the roadway.

DRAKE WALLS.—Thomas Gregory, Sept. 14: The branches in the 60 fathom level west, on south part, are worth from 10 to 12c. per fathom. The branches in the 65 cross-cut south are worth 11c. per fathom, and are promising for an improvement. In the 70 fm. level west we are opening south-west on some good veins of tin. From appearances we are of opinion the main branches are yet before us as in this direction. We have no other change to report since my last.

EAST BOTTLE HILL.—J. Eddy, Sept. 13: New Shaft: Since reported on last week we have sunk 4 ft. 6 in. through a beautiful channel of ground for mineral, and is of much the same character as was found about this same lode west in the adjoining mine, Old Bottle Hill, where their richest deposits of both tin and copper ore were discovered. We are now down 11 fms., and judging from the underlie of the lode we may expect to meet with it at the shaft in 4 or 5 fms. further sinking.—North Tin Lode: The lode east, in shallow adit level, is still holding its size, being about 2 feet wide; finding this lode to be equally rich for tin in the back and bottom of this level as in the end we are driving the deep adit level east, and in a few fathoms

tone prevailed at the close; satisfactory progress is being made with the works at the mines. Birdseye Creek shares continue to attract purchasers, at former quotations. Sierra Buttes are flatter, at 4 to 4½; a meeting is called for the 28th inst., for the purpose of declaring a dividend. In South Aurora shares a fair amount of business has been transacted, the price being tolerably firm, at 3½ to 3¾. An active business has been done in Pacific shares, at an advance; the reports from the mine are very satisfactory; considerable body of ore is being collected for crushing, and the various points of interest are looking extremely rich. Chontales shares are firmer upon the satisfactory advices, closing price 2 to 2½.

In English mines the dealings are comparatively restricted. Tarkerville shares are somewhat flatter, but the report from the mine is most satisfactory. East Van shares are also slightly flatter. Van, Roman Gravels, and Pennerley are firm. Bog and Perkins Beach are well reported on, but shares are quiet. West Chiverton shares, after having declined to 15½, close 18 to 19.

Tin mine shares have been dull. In Carn Brea, East Lovell, Tin-croft, and Great Vor, the business has been small, and the former has receded from the highest price.

In copper mines no material feature has occurred. South Caradon shares are quoted 190 to 210, and a fair amount of business has been transacted in West Caradon at 2½ to 2¾. The recent discoveries have induced large purchases. Cape Copper unchanged.

The following are the closing quotations:—Bog, 2½ to 2¾; Assheton, 4½ to 5½; Devon Great Consols, 95 to 105; East Van, 12½ to 12¾; East Lovell, 11½ to 12; Great Vor, 9½ to 10½; Great Laxey, 16½ to 17; Marke Valley, 5½ to 6; Roman Gravels, 19 to 19½; Tarkerville, 16 to 16½; Van, 55 to 57½; West Chiverton, 18 to 19; Tin-croft, 49 to 51; Almada, 1 to 1½; Birdseye Creek, 4 to 4½; Cape Copper, 9½ to 9¾; Chontales, 2 to 2½; Pacific, 5½ to 5½; Sweetland Creek, 3½ to 4½; St. John del Rey, 31½ to 32½.

IRISH MINE SHARE MARKET.—Mining shares have been in improved request for the last fortnight, chiefly owing to the recent great recovery of the Wicklow Copper Mining Company's shares from about 5½ to 7½, they being now readily saleable at the latter figure, and holders asking a further advance of 2s. 6d. Mining Company of Ireland shares have improved from 6½ to 6½ s., and Kilkiloe Slate Quarry shares from 21s. to 22s. 6d. Connoree stock, however, has dropped to 90s., and nothing doing. Our Irish Correspondent does not see that with reference to Carysfort Mines he pressed "somewhat unfairly" on the late management, as "Fair-Play" complains in the Journal of Sept. 2. As an old and practical miner, he has watched the vicissitudes of this remarkable mining property ever since it was partly opened by Messrs. Pell, Pike, and Salmon, and with but one exception, in the earlier re-working of these mines, he has not observed any great judgment used in the expenditure of large sums.

At the Mining Company of Ireland meeting, on Thursday (Mr. P. B. W'Arcy in the chair), it was resolved to register the company as a limited company under the Act of 1862, and thus comply with the Mining Company of Ireland Act, 1871. The Chairman explained, in submitting the resolution, that Lord Redesdale made the Act conditional that they should register under the Companies Act of 1862, which simplified the law relating to companies. By that Act, once they registered they would get rid of many difficulties. For instance, they would get rid of a most embarrassing clause—the registration of the Court of Chancery. They would not be obliged to register every transfer, which was very difficult and very expensive to the company. The next thing gained would be that all their property would be vested in the company the moment they registered. Another very important facility would be that they would be enabled to do legally what, unfortunately, they had been doing illegally for many years—smelting foreign ores. Under the old Act they had no power to buy any except Irish ores; but, as he explained at a previous meeting, it was found impossible to smelt the ores at Ballycotton except by mixing them with foreign ores. At the next half-yearly meeting the Articles of Association under the Companies Act of 1862 would be submitted by the directors.

It is announced that the extensive shipbuilding and engineering works of Messrs. C. and W. Earle, of Hull, have been purchased by a joint-stock company—EARLE'S SHIPBUILDING AND ENGINEERING COMPANY—through the agency of Messrs. Chadwicks, Adamson, Collier, and Co., of London and Manchester, with a capital of 300,000/, in shares of 50/- each, the prospectus of which is published in another column of this day's Journal. The works have long enjoyed a high reputation, and have recently been removed to a new site, with great advantages of space and deep water. The death of one partner, and the sudden prostration by serious illness of the survivor, are the reasons for the sale of the works and property. The land is all freehold. The board is a strong one, with Mr. Reed, C.B., late chief constructor of the Navy, as Chairman and managing director for a period of years. A special report by Mr. Reed, the result of a personal visit and examination, accompanies the prospectus.

The MALAGA SILVER-LEAD COMPANY is about to be formed to work the famous mines of Paquito, formerly known as Parillas. Notwithstanding their great antiquity these mines are still in full work by the natives, but under such a system as to render them in their hands a source of only small profit; but it is calculated that by proper drawing, winding, crushing, and dressing machinery the tens of thousands of tons of lode stuff partly broken underground, some hundreds of tons of silver-lead ore per month may be returned from these hitherto neglected resources, estimated by Mr. Tait Brindley, M.E., late mining surveyor to Earl Granville, at 75,000 tons. This refers only to two lodes, but large parallel lodes were discovered by Mr. Brindley. The mines are within nine miles of Malaga, whence the freight to England is 13s. per ton. The ore is described as averaging 7½ per cent. of lead and 20 oz. of silver per ton. The grant is held by a perpetual concession direct from the Royal Mining Board, at a rent of \$24 per annum, with the right of acquiring adjoining lands if required. There is an abundant supply of surface water for all necessary purposes, and the average wages of mining labourers is 1s. 8d. per day. The capital is 40,000/, in 4000 shares of 10/- each, to be fully paid; in addition to this debentures to the amount of 20,000/ will be issued at par, which will be entitled to a preferential dividend of 15 per cent. per annum, and will not be liable to be paid off for 10 years.

The LANESTOSA LEAD AND ZINC MINING COMPANY, with a capital of 24,000/, in shares of 2/- each, and a board of direction composed entirely of gentlemen connected with the management of dividend-paying mines in the same district, has been formed for purchasing and developing ten concessions, containing an area of 187 acres, constituting the existing Lanestosa Mines, with the plant, tools, and all ores, and materials thereon; and additional concessions of 200 acres, the right to which has been recently acquired by the vendors. The climate is good, and an abundant supply of labour can be obtained at a very cheap rate, a large number of miners residing on the spot. The ores can be forwarded from the mines to Limpias, and thence to Swansea, at a cost, including carriage, storage, and freight, of 18s. per ton. Extensive deposits of calamine, or zinc ore, exist in six of the concessions, from which more than 20,000 tons have been extracted, yielding a considerable profit. These will be explored, as they have not hitherto been, by systematic works, and will, it is expected, yield good returns; but the purpose for which more particularly this company is formed is to explore and work the lead lodes which exist in the other concessions. The plan of operations proposed by Messrs. John Taylor and Sons is to work the most promising calamine deposits, and, at the same time, to prosecute a system of exploratory works on the lead lodes in the concessions named—Auncion, La Luisa, and La Helena. This will mainly be accomplished by adit levels to be driven on the several lodes, which would prove them at points of great promise to depths varying from 30 to 70 fathoms from surface.

The MENZENBERG MINING COMPANY has been formed to work the mines of that name, adjoining the celebrated St. Josephberg and Marienberg Copper Mines, on the banks of the Rhine. The St. Josephberg and Marienberg Mines have paid in dividends the sum of more than 1,500,000/. from working on a comparatively small part of their lodes at a shallow depth. It is stated that all these lodes have been proved to run through the Menzenberg Mines. The property comprises an area of two miles east and west and a mile from north to south, and is less than a mile from the main European railway from Cologne to Frankfort. It is urged that as the mines are within a day's journey of London, their working would be practically under the direct supervision of the board. One of the lodes has been cut 21 ft. wide, carrying at surface carbonate, red oxide, and phosphate

of copper, while at a depth of only 36 feet the lode is found to be more compact, and increasing in richness. Upon the southern boundary of the concession the lode has just been proved to be large, and carrying rich ore throughout. A parallel lode has been found to be from 6 to 7 ft. wide, composed of red and black oxide and carbonate, phosphate, and sulphure of copper. Another parallel lode was discovered last August, which is described to be of the same character as the St. Josephberg. From the practical evidence which the directors have been able to obtain, they feel themselves justified in stating that they believe the Menzenberg Mines will prove equally productive with St. Josephberg and Marienberg. The property has been purchased on most favourable terms, and is to be paid for entirely in shares, so that all the subscribed capital will be used in developing the mines; we are not, therefore, surprised to hear that nearly all the shares have been applied for, and are at a high premium. The share list will close on Tuesday next.

The SILKSTONE FALL COLLIERY COMPANY has been formed with a capital of 50,000/, in 10,000 shares of 5/- each, to acquire a colliery at Silkstone, Yorkshire, containing the best seams of coal for domestic purposes, as well as for the manufacture of gas. It is stated that the colliery has been successfully and profitably worked for some years, the present output being more than 1000 tons per week, although working only half time, pending the settlement of the affairs of the deceased partner, in consequence of whose death it is stated that the colliery has been sold. The managing partner, under whose charge the property has been worked from the commencement of operations, has agreed to take his entire interest in paid-up shares, and also to give the company the benefit of his practical experience as managing director. The property contains a valuable bed of fire-clay, estimated to yield 120,000,000 bricks. A local demand exists for the coal at 10s. to 12s. per ton at the pit's mouth, and a profitable contract is now running for all the coke that can be supplied for twelve months, which is made at the colliery from the small coal. It is proposed to form a sinking fund to recoup the purchase-money during the tenure of the lease, after which the profits are estimated at 9400/- per annum, equal to a dividend of 24 per cent. upon the paid-up capital. By the formation of the sinking fund it is pointed out that, in addition to the dividends paid, the shareholders will at the expiration of nine years (the time it will take to work out the coal at present under lease upon the proposed scale of operations) possess the original purchase-money, to be employed in other properties, including valuable beds of ironstone. The terms of subscription are 10s. per share on application, 2/- on allotment, and 1/- on Nov. 1. In case of further call it has been arranged to give three months' notice, but the colliery being in profitable working further calls are not expected to be required.

The CASTLE GATE TIN MINING COMPANY has been formed, with a capital of 10,000/, in shares of 10/- each, for the purpose of working an extensive tin mining seat at St. Columb, Cornwall. The property is held from the Duchy at 1-18th dues, is situated on the side of a hill, and embraces a tin-bearing elvan of great width and richness, which in the opinion of geologists and mineralogists cannot fail to produce inexhaustible quantities of tin. In addition to the elvan, which has made great deposits in all similar mines, there are over 20 which can be now worked from surface at a very small cost. Capt. Thomas Parkyn reports that the lodes in this mine pass right through Castle-an-Dinas, and are found very rich in that mine. Captain Thomas Brewer, who has been through the mine several times, and seen all the lodes mentioned by Captain Parkyn; some of them are very rich indeed for tin, and will pay well for working. There is now rich work in the end on the north lode. Capt. James King, of Cornubia, has a high opinion of the mine, and believes it will be a profitable one when laid open. Captain John Hore knows these lodes make very rich in the Royalton Tin Mine, which can be seen at any time. And Captain James Hooper never met with the same favourable circumstances of great richness in the lodes, and beautiful strata for economical working. There are thousands of tons of tinstuff already laid open to view, which only require stamping to make marketable; and it is now proposed to erect a 30-in. cylinder engine, and 40 heads of stamps, the necessary work for preparing stuff for stamping being made in the meantime. The prospectus will be found in another column.

At the Swansea Ticketing, on Tuesday, 1885 tons of ore were sold, realising 20,560. 17s. 6d. The particulars of the sale were—Average standard for 9 per cent. produce, 90. 15s.; average produce, 16; average price per ton, 107. 18s. 2d; quantity of fine copper, 301 tons 12 cwt. The following are the particulars of the two last sales:—Date. Tons. Standard. Produce. Price per ton. Per unit. Ore copper. Aug. 15, 1883 ... £26 18 0 ... 10½ ... £6 11 0 ... 12s. 11d. ... £54 14 6 Sept. 12, 1883 ... 90 15 0 ... 16 ... 10 18 2 ... 13 7½ ... 68 2 6 Compared with the last sale, the advance has been in the standard 37. 17s., and in the price per ton of ore about 12s. 4d. There will be no sale on Oct. 3.

The allotment letters of the SILVER STAR MINING COMPANY were posted this day.

The shares of the South Aurora Silver Mining Company are 3½ per share.

STRATHDON HEMATITE ORES.

THE PROPRIETORS OF ALLARGUE, in the parish of STRATHDON, and county of ABERDEEN, are prepared to entertain PROPOSALS for a LEASE for RESUMING MINING OPERATIONS in this field.

Application may be made to MILNE and WALKER, Advocates, 16, Union-terrace, Aberdeen.

COLORADO GOLD AND SILVER MINING DISTRICT.

A N ENGLISH GENTLEMAN will shortly arrive in London who has visited and inspected several of these mines, and will be PREPARED TO OFFER SOME GOOD PROPERTIES AT LOW PRICES. Parties desiring to purchase can apply to "A. P." MINING JOURNAL Office, 26, Fleet-street.

TO MINING ENGINEERS.

A FIRST-CLASS MAN WANTED TO EXAMINE A SILVER MINE in NEVADA. One acquainted with the geology of the country preferred. Arrangements might be made to remain as Manager. Address, "Silver," Deacon's, Leadenhall-street.

CASHIER, OR MANAGER.

A GENTLEMAN, who has filled his present position as above in a large Manufacturing Concern for the past five years, is OPEN TO A NEW ENGAGEMENT. Highest testimonials and references. Security given. Address, "B. S. J.," MINING JOURNAL Office, 26, Fleet-street, London. September 4, 1871.

A MINING ENGINEER, of large experience, OFFERS his SERVICES to anyone requiring REPORTS, VALUATIONS, PLANS, ESTIMATES, or ADVICE of any kind as to the OPENING OUT or WORKING of MINERALS at home or abroad.

Address, "C. V. and M. E.," MINING JOURNAL Office, 26, Fleet-street, E.C.

WANTED, a SITUATION, to TAKE CHARGE of a LEAD MINE, by one who has had extensive experience, and thoroughly understands Dialling, Mapping, and Assaying, together with every other branch connected with Mining.

Testimonials and references can be produced from high authorities.

Address, "A. B. I. O.," TIMES Office, Douglas, Isle of Man.

The Advertiser knows of a VALUABLE PIECE of MINERAL GROUND on the Island, which he could secure; but, as he requires some little assistance, would like to correspond with parties who are disposed to assist in its development.

WANTED, a SITUATION as VIEWER or RESIDENT VIEWER. Can be well recommended by several leading Mining Engineers. Address, "T. A.," MINING JOURNAL Office, 26, Fleet-street, London.

WANTED, by a Gentleman who has an extensive acquaintance with Birmingham manufacturers, a COMMISSION for the SALE of COPPER, SPELTER, TIN, and TIN PLATES.

Apply by letter to "M.," New Club, Birmingham.

WANTED TO LET, immediately, in the Parish of Harberton, near Totnes, Devon, PART of a NEW SLATE QUARRY (called Hardy's Diggings), according to arrangements as may be agreed upon. Quality very poor, of dark blue rock. Sole lessee, Miss Catherine Hardy. The proprietor, Mr. R. J. Hardy, will grant an additional lease for any period the company wish.

Address, Miss CATHERINE HARDY, or Mr. R. J. HARDY, Merchant, Harberton, near Totnes, Devon.

ZINC AND LEAD ORES.

I AM PAYING as follows:—

BLENDE.—135s. for 63 units of zinc, deducting 3s. 3d. per unit below.

CALAMINE—10s. more than for blende.

LEAD-SILVER ORES.—215s. for 85 units of lead, deducting 3s. 3d. per unit below, all the silver being paid extra 1s. per ounce troy.

ZINC AND LEAD ORES MIXED TOGETHER.—Very high prices.

The above prices are fixed for a ton (20 cwt.) of ore, f.o.b. at Antwerp.

I BUY any quantities, however large, contracting for as many years as desired. Particulars by letter.

ARMAND FALLIZE, Ingénieur, à Liège (Belgium).

FOREIGN TIN BY PUBLIC TENDER.

A BOUT 7000 to 8000 Slabs of STRAITS and MALACCA TIN more or less about THREE HUNDRED TONS, WILL BE SOLD on WEDNESDAY, the 20th Inst., by PUBLIC TENDER, in Lots of Ten Tons each, by

HENRY BATH AND SON,

62, Graham House, London, E.C.

Full particulars and forms of tender can be obtained from HENRY BATH and SON on and after the 15th Inst.

Royal School of Mines.

SIR RODERICK IMPEY MURCHISON, Bart., K.C.B., F.R.S., &c.

During the TWENTY-FIRST SESSION, 1871-72, which will commence on the 2nd of October, the following COURSES OF LECTURES and PRACTICAL DEMONSTRATIONS will be given:—

1.—CHEMISTRY By E. FRANKLAND, Ph.D., F.R.S.

2.—METALLURGY By JOHN PERCY, M.D., F.R.S.

3.—NATURAL HISTORY By T. H. HUXLEY, LL.D., F.R.S.

4.—MINERALOGY By WARINGTON W. SMITH, M.A., F.R.S.

5.—MINING By A. C. RAMSAY, LL.D., F.R.S.

6.—GEOLOGY By T. M. GOODEVE, M.A.

7.—APPLIED MECHANICS By FREDERIC GUTHRIE, F.R.S.

8.—PHYSICS By J. HAYTHORNE EDGAR, M.A.

9.—MECHANICAL DRAWING, by the Rev. J. HAYTHORNE EDGAR, M.A.

The Fee for Students desirous of becoming Associates is £30 in one sum, on entrance, or two annual payments of £20, exclusive of the Laboratories.

Pupils are received in the Royal College of Chemistry (the Laboratory of the School) under the direction of Dr. Frankland, and in the Metallurgical Laboratory under the direction of Dr. Percy.

Tickets to separate Courses of Lectures are issued at £3 and £4 each.

Officers in the Queen's Service, Her Majesty's Consuls, Acting Mining Agents, and Managers, may obtain Tickets at reduced prices.

Science Teachers are also admitted to the Lectures at reduced fees.

His Royal Highness the Prince of Wales grants Two Scholarships, and several others have also been established by Government.

For a prospectus and information, apply to the Registrar, Royal School of Mines, Jermyn-street, London, S.W. TRENHAM REEKS, Registrar.

King's College, London.

D EPARTMENT OF APPLIED SCIENCES.—NEW STUDENTS will be ADMITTED on TUESDAY, October 3.

The course of study provides a system of practical education for young men who intend to engage in Engineering, Surveying, Architecture, and the higher branches of Chemical and Manufacturing Art.

This department has attached to it a Workshop, also Chemical, Physical, and Photographic Laboratories.

Two Exhibitions of £30 and £21 will be given at the commencement of the Michaelmas Term, by competitive examination amongst the Students matriculating at that time. The subjects of examination will be Arithmetic, Algebra, Geometry, Trigonometry, and Mathematics applied to Mechanics.

For information, apply personally, or by post card, to—

J. W. CUNNINGHAM, Esq., Secretary.

TECHNICAL EDUCATION

SCIENCE AND ART DEPARTMENT.

ROYAL COLLEGE OF SCIENCE FOR IRELAND, STEPHEN'S GREEN, DUBLIN.

SESSION 1871-72.

This College supplies, as far as practicable, a complete Course of Instruction in Science applicable to the Industrial Arts, especially those which

THE CASTLE GATE TIN MINING COMPANY

(LIMITED).

Capital, £10,000, in 1000 shares, limited to £10 each.

The first payment is £2 per share, which must be made on application for shares, and no call will be made before the expiration of three months from this date.

Taking into consideration that large returns of tin can be immediately made, it is not thought that more than £5 per share will be required to be called up. Priority of allotment will be given to applicants desirous to pay up in full, and dividends will be paid *pro rata* on the amounts paid.

DIRECTORS.

DR. THOMAS PHILBRICK, College Road, Brighton.

CAPTAIN H. BULLKELLY, late H. M. A.

CAPTAIN G. BEAMISH, Corinthian Club.

DR. WM. MORGAN, Tyndall Place, Islington.

JOHN NEWCOMB, Esq., Westmoreland Road, Bayswater.

BANKERS.

THE CONSOLIDATED BANK (LIMITED), 32, Threadneedle Street.

THE SOUTH CORNWALL BANKING COMPANY, St. Austell, Cornwall.

SOLICITORS.

MESSRS. LAING, EVANS, AND CO., 10, John Street, Bedford Row.

BROKERS.

THE LONDON STOCK AND SHARE AGENCY, 165, Strand, London.

SECRETARY (pro tem.).

JOHN FOX FARBRIDGE, Esq., 3, Winchester Buildings, City.

OFFICES—3, WINCHESTER BUILDINGS, LONDON, E.C.

PARTICULARS AND PROSPECTUS OF THE CASTLE GATE TIN MINING COMPANY (LIMITED).

This extensive tin mining sett is held under licence from the Duchy of Cornwall (Prince of Wales) for 21 years, at a royalty of 1-18th dues on all ores sold. The mine is situated in the parish of St. Columb, on the side of a hill, and the surface working has been of a most extensive and extraordinary character by the ancients, and from which, at remarkably shallow levels, immense profits have been realised. It is a tin-bearing elvan of great width and richness, and which, in the opinion of geologists and mineralogists thoroughly conversant with this peculiar district, cannot fail to produce inexhaustible quantities of tin. This district has for ages been celebrated for tin streaming. So rich are the lodes in this and other mines adjoining that pure tin has been washed away from these hills into the valley, and there gathered by the old miners.

It is now proposed to erect a steam-engine, 3-in. cylinder, and 40 heads of stamps, and during the erection of which the levels will be cleared, and very large quantities of rich tin-stuff raised, ready to be stamped and sent to market. Therefore, no time will be lost to the shareholders in obtaining the profitable result of the working.

The following are reasons why the mine can be recommended:—

1.—It is on a hill, and can be worked without expensive sinking for several years.

2.—It is a rich tin-bearing elvan, which has made such great deposits in all similar mines.

3.—There are thousands of tons of paying tin-stuff already laid open to view, and only require stamping to make marketable.

4.—There being but 1000 shares in the company, and the amount of capital being small, the dividends will be proportionately large.

5.—There are over 20 lodes of tin, besides the elvan, which can be worked now from surface at a very small cost.

6.—It is capable of making such large returns of tin that dividends must result in a few months from the present time, thus avoiding the great delay and anxiety so frequently met with in the re-working of old abandoned and deep mines.

7.—The mine is now at work, therefore shareholders will enter a going concern.

Taking all the surrounding circumstances into consideration, it is one of the most favourable opportunities of investing ever offered, and it is admitted by all metal brokers that tin, through the falling off of supplies from the Eastern Archipelago, and the increased demand for the metal, must command higher figures than at the present moment.

Prospectuses and forms of application for shares, and detailed agents' reports, may be had of the Secretary, Brokers, or Bankers of the company. As considerably more than half the capital has been privately subscribed for, early application for shares is necessary to secure an allotment.

London, September 15, 1871.

THE MENZENBERG MINING COMPANY

(LIMITED).

Registered under the Companies Acts, 1862 and 1867, by which each member's liability is limited to the amount of his shares.

Capital £63,000, divided into 12,000 shares of £5 5s. (35 thls.) each. £1 per share is payable on application, £2 on allotment, and the balance in six months from date of allotment.

Where no allotment is made, the deposits will be immediately returned in full. The mining grants are held in perpetuity from the Crown of Prussia, subject to a royalty of 2 per cent. only on the ore raised.

The following will be the future Board of

DIRECTORS.

JOHN BIRD, Esq., J.P., Wynyard House, Fetham.

RICHARD COURtenay, Esq., Beechcroft, Sevenoaks.

THOMAS DICKINS, Esq., J.P., Broughton Park, Manchester (Chairman of the Silk Supply Association).

MAJOR GERMAN, J.P., Vine-court, Sevenoaks (Director of the London Val de Travers Asphaltic Paving Company).

ELLISS, Esq., J.P., Werneth Park, Oldham, near Manchester (Director of the Globe Marine Insurance Company).

WILLIAM WATSON PERE, Esq., 11, Blomfield-terrace, Westbourne-terrace.

GEORGE WILLIAMSON, Esq., 2, East India-avenue, London.

BANKERS.

MESSRS. ROBARTS, LUBBOCK, and Co., Lombard-street, London; the MANCHESTER AND COUNTY BANK (Limited), Manchester.

BROKERS—MESSRS. ST. ALPHONSE AND HALLS, 75, Old Broad-street, London.

SOLICITOR.

A. S. CROOME, Esq., (Messrs. Courtenay and Coome), 9, Grace-church-street, London.

AUDITOR.

MR. SAMUEL SLATER, 36A, Moorgate-street, London, Public Accountant.

SECRETARY (pro tem.)—MR. WM. WILBERFORCE BIRD.

OFFICES—20, GREAT WINCHESTER STREET, LONDON, E.C.

PROSPECTUS.

This company is formed for the purpose of purchasing and working the Menzenberg Mines, adjoining the celebrated St. Josephberg and Marienberg Copper Mines, which have paid in dividends more than £1,500,000 sterling, and that from working on a comparatively small part of their lodes at a shallow depth. All the lodes which have been so immensely productive in those mines have now, as appears by the reports accompanying the prospectus, been proved to run through this property. It is about two miles from east to west, and more than a mile from north to south, and is situated about one and a half mile from the right bank of the Rhine, and three-quarters of a mile from the railway station at Bonn, on the main European railway from Deutz (Cologne) to Frankfort. The roads are excellent, the facilities for carriage unusually good, whilst skilled and ordinary labour, coal, and wood are abundant and cheap. The mine being within a day's journey of London its working will be practically under the direct supervision of the Board.

One of the lodes has been cut in the vineyard of Menzenberg, where it is 21 ft. wide, and at surface carries carbonate, red oxide, and phosphate of copper, while six lachters (a lachter is 6 ft. 10½ inches) deeper the lode is more compact, and contains a much larger quantity of copper ore than at surface. This lode has, within the last few weeks, been opened up on the southern boundary of the concession, where it is large, and carries rich ore throughout. A shaft has been sunk on a second and parallel lode, about three lachters from the southern boundary, where it is 6 to 7 ft. wide, and composed of red and black oxide, carbonate, phosphate, and sulphurites of copper, imbedded in spar. This lode again appears in the Menzenberg Hotel Garden, 200 lachters further north, where it is 8 to 10 ft. wide, and carries ore at surface, and is again met with in the Zickelberg Vineyard, 300 lachters still further north.

In an adit commenced to the east of Menzenberg Hotel, a parallel lode was discovered on the 17th of August last, which is precisely of the same character as St. Josephberg, and as it is being driven on northward into a high hill, will probably produce large returns of ore without machinery. Similar results may be expected from another lode about 40 lachters west from that last referred to, and which would be intersected by the same adit. Four large and rich lodes lie between the last-mentioned lodes and the two first referred to.

The stratum is identical with that of the St. Josephberg and Marienberg Mines, and an assay of four specimens of the ores of the former, made by Messrs. Johnson and Sons, Assayers to the Bank of England, gives the following results:—

No. 1 lode	Fin copper	50-60 per cent.
No. 4 lode	ditto	23-40 "
Deep adit	ditto	10-40 "
Deep adit	ditto	17-10 "

thus proving the very rich quality of these lodes.

Before the late continental war Professor Forbes, F.R.S., and Capt. Thomas Rickard made the reports accompanying the prospectus, which were laid before the directors, who, however, before introducing this enterprise to the public under the sanction of their names required further explorations to be made, and some of them, under an arrangement with the proprietors, provided the necessary funds for that purpose. The satisfactory result of these operations is summed up in the report of Mr. Thos. Hoewarne, of London, and Herr Obersteiger M. Bleibl, the manager of the St. Josephberg Mine, and the directors confidently expect, upon the highest authority, that the Menzenberg Mines will prove equally productive with the St. Josephberg and Marienberg Mines.

Considering the vast extent of the mining ground, also what has been done to prove the lodes, and that the property is held in perpetuity at a royalty of only a fifth, whilst the average royalty in Cornwall is a fifteenth, the leases generally for only 21 years, and the ore poor in comparison with that raised from the St. Josephberg and Marienberg Mines, the purchase of the property has been arranged on most favourable terms, the consideration being 8000 paid-up shares (to rank for dividend only in proportion to the amount called up on the other shares)—so that all the subscribed capital will be devoted to the purposes of the company.

Applications for shares may be made in the form accompanying the prospectus, and should be left at the company's bankers in London or Manchester.

The memorandum and articles of association, agreement, reports, concessions, and maps, &c., can be seen at the offices of the company, where, and at the bankers, brokers, and solicitors, prospectuses and forms of application for shares can be obtained.

THE MENZENBERG MINING COMPANY (LIMITED).

Notice is hereby given, that the LIST OF APPLICATIONS FOR SHARES

will CLOSE ON TUESDAY NEXT, the 19th instant.

W. W. BIRD, Secretary.

NOTICES TO CORRESPONDENTS.

Much inconvenience having arisen in consequence of several of the numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an annual and useful work of reference.

SIR.—Has the power of a mine to discharge an agent in the mine without consulting the adventurers, or is it a legal notice when part of the month is expired?—X. Y. Z.

SIR.—Will any correspondent or engineer make known in this Journal the most approved means of adapting the funes of sea-going steamers for the consumption of either anthracite or bituminous coal, so as to be able to consume which ever is to be had cheapest when required either at home or abroad? Do the American steamers prefer using the anthracite coals because they are found to answer better, or do they use the bituminous coals also?—INQUIRER.

ALUMINIUM GOLD.—As the alloy of aluminium and copper to which this name is given appears to be coming largely into use, I should be glad to learn the price per pound at which it can be purchased in thin plates—say, 50 to the inch thickness; and whether the nature of the alloy permits of its being brazed together like commercial copper, or what solder should be used? I have used copper for a purpose to which I think I could apply aluminium gold.—K. C.

OXIDE OF IRON.—Will any reader of the Journal kindly inform me the current value of this mineral delivered in South Staffordshire? By analysis it contains about 12 to 15 per cent. of iron, is raised and got in a limestone district, and has properties congenial for helping other ores to flux.—Y. G.

MINING IN COLORADO.—I see in the Journal of Saturday mention of two mines in Colorado—the Kansas and the Seaton—that companies are being formed to work, and I am glad to find that English capital is to be invested in that part or the country. I have only a few days returned from that place, having left Central City on Aug. 15, after four years' tour through all the mining districts of Colorado yet opened up, and I shall be happy to give information on the mines of that country to any persons investing therein in answer to letters through the Journal.—H. B. GROSE: St. Austell, Cornwall, Sept. 12.

WHEAL AGAR.—I should like to know from some one connected with the working of this mine, how long they have been sinking, what sum of money has been expended, what discoveries have been made, and the probable further outlay required to put the mine in a state to pay its way, supposing a lode worth 75/- per fathom is at hand.

NOMINAL CAPITAL—"New Chum."—When vendors receive 10,000/- in shares as part of the purchase money out of 50,000/- capital, in 10/- shares, the real number of shares offered and subscribed by the public is 4000, while 1000 go to the vendors, leaving 40,000/-, minus the cash payment, for working.

PACIFIC.—In Capt. Prideaux's report, which appeared in last week's Journal, for "No. 3 stope, the ledge is 13 feet thick," read 18 inches.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

SCALE FOR ADVERTISEMENTS.—Our charge for general advertisements is—for six lines and under, 1s.; per line afterwards, 1d. Average, 12 words per line.

* * * With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence: Awful Explosion at the Moss Colliery, Wigton; Coal-Cutting Machinery (W. Leatham); Our Fuel Supply—Compressed Peat; Commercial Tontines; American Mining Speculation (H. H. Roche); American Mines, and English Capital; the Times and Mining on the Pacific Coast; Cape Copper Mining Company (M. Woodfield); Swansea Smelting and Smelting Company; Gas in Metallic Mines (A. Francis); Tributaries' Ore; Mines of Cardiganshire, and their Inexhaustible Treasures (A. Francis); Undeveloped Mining Districts (R. Symons); Scientific Mining; Mynyddgorddu Mine, Cardiganshire—Excursion of the Iron and Steel Institute—Llanelli Iron and Coal Mines, Salop—Foreign Mining and Metallurgy—Foreign Mines Reports, &c.

tific classes, where the young and rising could receive a proper mining or technical education, fitting them for the after duties in life? Are not the Government most lax in carrying out their responsibilities which should properly devolve upon them? Schools are to be provided at the public expense for the teaching of reading, writing, and arithmetic, why should not the necessary rudiments of a mining and scientific education be as easily within the reach of those who need such instruction? Could not some most excellent lessons be taken from the Continent and from America, where such schools are within the reach of all? Is it not a somewhat invidious and painful reflection upon our past educational career and our present status as a nation that in very many of our large manufactures, requiring chemical analysis and scientific manipulation, the principal and more remunerative departments are filled by German or continental chemists? In the smelting and treatment of ores, in the manufacture of chemicals, and the make of other articles requiring more than usual scientific skill and knowledge, the first and more important processes are carried out by gentlemen who have been educated in such departments in the German or continental mining schools. Such things ought surely not to continue. The nation ought to be able to educate its own scientific men; and some such steps as those adopted on the Continent should be taken if we would keep up Old England's prestige for her manufactures and her sciences. Our Parliament is assuredly not doing its duty in this most important department, and our colliery proprietors and large manufacturers who represent us in the House of Commons will pardon us in saying that they are somewhat remiss in not pressing the claims of mining and scientific schools upon the serious attention of the Government.

It has been said that the history of our legislation, so far as the Factory Acts are concerned, has been a constant and steady succession of triumphs over ignorance. Such may be the case, but whilst the Legislature, on the one hand, appears exceedingly anxious to interfere between and employers and employed, and enforces hours of relaxation for the workmen, and prohibits young persons from working during certain hours, let opportunities be afforded for taking advantage of this relaxation for mental culture and scientific education. If the Factory and Workshops Act be a boon to the working classes, let it be supplemented with the establishment of mining schools and scientific educational establishments throughout the land, and then our colliers, our engineers, our scientific artificers, and our manufacturers generally, will have an appreciable value of the efforts of the Legislature to improve their social and intellectual status. We trust now that the Government has taken upon itself to legislate on behalf of the working classes it will also consider it a duty equally incumbent upon them to provide mining schools and scientific institutions, where such an education shall be received as will fit our operatives to more ably discharge the duties which devolve upon them.

THE DISPUTES IN THE IRON AND COAL TRADES.

Disputes between the employers and employed in the ironworks and collieries in nearly all parts of the kingdom as to wages and working hours appear to be on the increase, and are assuming quite a chronic character. The engineers' strike at Newcastle-on-Tyne has been followed by others at Leeds, Sheffield, and other places, and where demands have been allowed they have been conceded, in some instances at least, because contracts were in hand that must be completed within a certain time. Ironmasters and engineers have to meet in the continental and other markets foreign producers of the same material, who have the great advantage of a plentiful supply of cheap labour. Consequently, contracts are entered into by English manufacturers at prices in which the existing rate of wages paid by them is an important consideration, and it, therefore, follows that any increase in payments to workmen on orders in hand must have the effect of reducing, if it does not altogether absorb, the fair profit to which the master is entitled. The effect must also be to the benefit of the foreigner, and tending to decrease home orders and lower the rate of wages. Shortening the hours of labour is, of course, equivalent to raising wages.

It is true that of late the iron trade has been exceptionally good, as have the wages of workmen, and it is worthy of the serious consideration of our skilled labourers what will be the result if in every brisk season a demand without notice is to be made for an increase of wages. Such a state of things would not only increase the numbers of persons engaged in any employment where wages were being constantly raised, but in the end send a very large portion of the work into other places where labour was cheap and strikes unknown, or be the means of converting unskilled into skilled labour. Then, the law of supply and demand would soon settle the scale of payment. At Newcastle-on-Tyne a large body of German and other foreign workmen have been introduced, and although it is probable that a large proportion of them may be induced to leave, yet a great number will remain and settle in this country, cause others to come over, and so greatly increase the number of persons engaged in the iron trade. With excess of labour over the requirements for it—and the present prosperity cannot be ensured—we may have before long a slack season, when we shall have little work and less prices, a state of things for which the workmen will to no small extent have themselves only to blame.

At Leeds the strikes have in most instances been successful, and the men have succeeded in diminishing the moderate profits of their employers on the work in hand, one firm alone losing at least 60/- per week. Discontent is also manifesting itself in Sheffield, and before long we may hear of some dispute in that important centre of the steel and iron industries.

The colliers in nearly all parts of the kingdom are in an agitated state, and the strike made by those in South Wales has been followed by an almost general demand for an increase of wages. The earnings of the coal miners in England and Wales are now upwards of 16,000,000/- annually, so that an increase to the extent of 10 per cent. would amount to the very large sum of 1,600,000/-, and, if a general rise in the price of coal to that extent were made, it is more than probable it would seriously interfere with the trade. At the present time a large quantity of coal is sent to various parts of the world, our exports being fully equal to one-tenth of the entire production, France, Russia, Prussia, and the East Indies are amongst our best customers, whilst we also send to Belgium as well; but, as in all those countries there are vast fields of coal, any sensible advance in the price of that mineral would have the effect of stimulating their development, so that in a few years they would be able to supply their own wants, and ultimately that of their neighbours, now dependent upon us.

The strike in South Wales has placed the men there in by no means an enviable position, for great numbers of them will scarcely ever attain the comfortable position they enjoyed before it commenced, whilst others have left their homes forever. The suffering and privation endured have been great, and the loss in physique, and the demoralisation of families, will be food for serious reflection long after the strike has terminated. The loss to the owners has also been heavy, having to keep their pits in a good state, as well as the machinery, besides having their capital lying idle—a proof in itself that the colliery proprietors, as body, did not feel justified in conceding the demands asked for. It is true that the coal trade is in a rather healthy state, but it must be remembered that there are few businesses in which the competition is so keen, seeing that 1d. or 2d. per ton is of the greatest consequence. This was forcibly shown in the recent battle between the Midland and Great Northern Railway Companies when the difference of about 6d. in the conveyance of a ton of coal a distance of 160

terest to resort to a strike—a system which is opposed to the principle of free trade in labour, as much as it is to the real interests and independence of the deserving workmen.

THE COAL TRADE OF BIRKENHEAD.

This branch of Birkenhead business is, upon the whole, increasing in importance; and the financial position of the Mersey Docks and Harbour Board has been materially benefited by it, as the long useless Birkenhead portion of the estate of the board has been utilised to some small extent for the shipment and movement of coal. In 1860 the Great Float at Birkenhead was opened, and the export coal trade was removed to that locality from the Morpeth and Egerton Docks, where previous to that period coal had been shipped. The arrangements for the trade have been improved; since it was first opened three staithes for the shipment of coal on the hydraulic principle have been erected, and have gradually come into general use for small-sized vessels, of 500 tons and under; but larger vessels, as a rule, still load by the barrow system. In September, 1863, the Great Low Water Basin at Birkenhead was opened, and enabled vessels of the largest tonnage to enter the Flotilla on any tide, either neap or spring. The great northern deep water entrances into the Flotilla from the river were opened in 1866, and completed the facilities for ships of the largest tonnage entering and leaving the Great Flotilla on any tide with full and complete cargoes. The quantities of coal brought to Birkenhead by railway in the ten years ending with 1870, inclusive, were as annexed:—

	Tons	Tons	
1861	291,015	1866	652,278
1862	356,802	1867	875,635
1863	428,478	1868	896,846
1864	525,665	1869	753,591
1865	476,505	1870	718,367

The receipts of coal at Birkenhead have thus, upon the whole, very greatly increased of late, and it is noticeable that they have far outstripped the exports, which only expanded as follows in the ten years:—

	Tons	Tons	
1861	19,010	1866	318,374
1862	230,000	1867	385,980
1863	248,936	1868	374,352
1864	313,393	1869	239,46
1865	227,348	1870	224,835

The local consumption of coal in Birkenhead would thus seem to have greatly increased in the ten years both for industrial and domestic purposes; the demand for steamers has also grown with the general progress of steam shipping enterprise. It is noticeable, however, that no increase has taken place in the foreign export coal trade of the Mersey during the last ten years, the exports foreign year by year having been as follows:—

From	Exclusive of	From	Exclusive of	From	Exclusive of
Birkenhead.	Birkenhead.	Birkenhead.	Birkenhead.	Birkenhead.	Birkenhead.
1861 .. Tons 190,000	..... 434,549	1866 .. Tons 318,374	..... 389,406	1867 .. Tons 385,980	..... 282,176
1862 .. 230,000	..... 379,748	1868 ..	..... 374,352	1869 ..	..... 266,795
1863 .. 248,936	..... 337,777	1870 ..	..... 224,835		
1864 ..	..... 313,393	1861 .. 313,398	..... 431,441	1865 .. 227,348	..... 389,628
1865 ..	..... 227,348	1866 ..	..... 389,628	1867 ..	..... 389,628

The aggregate foreign exports year by year were thus (although the total for 1870 shows a decline as compared for 1861, it presents some advance upon that for 1855, which amounted to 406,561 tons):—

	Tons	Tons	Tons
Newcastle	2,388,218	2,382,993	2,809,643
Cardiff	1,857,161	2,090,702	2,301,761
Sunderland	1,110,022	1,184,433	1,2,9,078
Liverpool	707,880	611,117	531,717

The exports would accordingly appear to have been progressively declining for the last five years, and Liverpool (which must be taken to include Birkenhead for the purposes of the comparison) appears at a disadvantage in the matter of her export coal trade when contrasted with Newcastle, Cardiff, and Sunderland. Thus the total exports from the four ports were as follows in 1866, 1868, and 1870:—

Port.	Tons.	Tons.	Tons.
Newcastle	2,388,218	2,382,993	2,809,643
Cardiff	1,857,161	2,090,702	2,301,761
Sunderland	1,110,022	1,184,433	1,2,9,078
Liverpool	707,880	611,117	531,717

This comparison does not, however, affect the fact that the coal trade of Birkenhead is increasing in importance upon the whole. Thus the quantity of coal tipped at Birkenhead in the last five years was as follows:—1866, 311,639 tons; 1867, 530,793 tons; 1868, 549,401 tons; 1869, 480,817 tons; and 1870, 425,248 tons. The greater part of this coal was tipped by the Mersey Docks and Harbour Board. The past year was a dull one for the Birkenhead coal trade, and the statistics which we have cited reflect many fluctuations. Still the general course of Birkenhead business is decidedly upwards, and this year's statistics are expected to present a sensible improvement.

THE COLLIER—AS HE IS PAINTED, AND AS HE IS.

Although the working men have of late years found great favour with statesmen and advanced politicians, still there is one important section that has not had quite so much justice done to it in its social characteristics as it is really entitled to. It has been the fashion to describe the working collier as the lowest type of the *genus homo*, and he has furnished material for the cartoons of "Punch," as well as for highly flavoured articles from special correspondents of the daily press, no doubt to the great delectation of those who only know a colliery by name, and as a place where coal was got by some means or other. Those caricatures and articles are the work of men of talent, who for the most part reside far away from the scenes which they depict, whilst the knowledge obtained is generally from a casual visit of a day or two on the occurrence of some great mining fatality. During their brief visit, however, they generally see what persons residing in the place for half a century have never seen, and it is to be regretted that such palpable exaggerations with regard to a body of men engaged in the most dangerous of our industries should receive the ready credence they do. It is true the collier, from the nature of his employment, and his blackened face, does not look a particular interesting subject, but we may say with truth, that—

"As what some people paint him."

Perhaps of all the gross exaggerations perpetrated at the expense of the collier, nothing has in any way equalled that which appeared not so very long ago from the special correspondent of a London daily paper, boasting "the largest circulation in the world." So extraordinary, indeed, was the story of the correspondent that it formed the staple of a rollicking "leader" in the same paper. The writer of the letter, in the first instance, in noticing the South Yorkshire collier, said he was a man particularly fond of the most expensive rings, some wearing those worth 50*l.*, with gold chains to match. He also kept his hounds, for he was a great sportsman; and on Sunday he was in the habit of going in a cab to see his keeper and visit his grounds. The personal "get up" of the collier was only equalled by his profuse and wasteful style of living, and the costly cookery of his wife, for his beefsteaks were fried in butter, and his game and larger joints in a corresponding manner. His wife, in making tea, so saturated them with fat that it ran down the oven in something like a stream. Such was the picture drawn of the South Yorkshire collier by a writer in a daily paper in the metropolis, and, no doubt, believed in by a large majority of the readers of "the largest circulation in the world." But what are the actual facts? The South Yorkshire collier is amongst the most provident and intelligent of the body he belongs to in the kingdom, and dresses decently, was testifies by Lord Elcho at Barnsley, when 9000 of his mates walked in procession. He is anything but partial to jewellery, and those who know him would as soon expect to find a ring—more especially a valuable one—in his nose as on his finger; and he cares not for gold guards, but likes a useful silver watch. Rising to go to work about 4 o'clock in the morning, for he often has to walk three or four miles to the pit, he has his breakfast, and starts off with a man of coal tea and a crust of dry bread as his fare until the labour of the day is finished. Returning home, he washes and has his dinner—a substantial meal, without any extra gastronomic aids, for appetite for meat, lean and good. As a rule, his wife is a good baker, like most Yorkshire women, seeing that all the bread required is made at home. He does not believe in paying for cabs, and, instead of keeping a gamekeeper, is rather opposed to the whole fraternity of keepers. Having thus given the ideal and the real, we may say that amongst the South Yorkshire miners many of them are

local preachers and Sunday-school teachers, and not a few are also freeholders. Many of them are fond of a glass of beer, but not more so than others engaged in different work. Some of the younger members keep "snap" dogs for rabbit coursing in enclosed grounds.

It has transpired that the gentleman who wrote the notice we have alluded to, painting the collier in such rich colours, was crammed by a waggish waiter at the King's Head Hotel, in Barnsley, and swallowed the hook baited with absurdities along with his "chop."

Another correspondent of a London daily paper, writing from the neighbourhood of Wigan, a few days since, also falls into some singular errors, and speaks most disparagingly of the unfortunate collier. Of him he says, "By the time he reaches middle life he is a rather sedate sort of savage," and his children are styled "noisy barbarians." The same writer, to show his knowledge of mining matters, alludes to the "butty" system in South Yorkshire, although it does not exist there in any shape. Another item of information given is that the collier "indulges largely in poultry, and game is not unfrequently seen upon his table." Now, we dare say he would like to see his table so furnished, but it is simply ridiculous to say that it is so. We may say that there has been a marked improvement during the last eight or ten years in the social and moral condition of the colliers, in some districts more than others, whilst the progress now making is more rapid than ever it has been. Looking at the dangers which surround all engaged in raising coal, which is admitted to be the great source of England's greatness, and contributing as it does to the social requirements of all classes of the community, we think we are fully justified in repelling the unfounded charges brought by sensational writers against a body, whatever may be their short comings, that have shown in the hour of danger the qualities befitting heroes. When a sudden and terrible calamity has taken place they have never hesitated to volunteer into the jaws of death, in the hope of saving some fellow-worker, and fought against the overwhelming fire-damp until they have succumbed to its fatal effects. Surely, men that are capable of such acts are deserving of more consideration at the hands of those who are indebted to them for so much comfort, and even luxury, than to be characterised as "savages," and held up to ridicule for tastes and habits that do not belong to them. They are not all that could be desired, but they are, at least, entitled to have the truth spoken of them.

ENGLISH COAL IN FRANCE.—The total shipments of English coal to France to July 31 this year amounted to 1,047,404 tons, as compared with 1,376,938 tons in the corresponding period of 1870. There was an increase in the shipments to Cherbourg which amounted to July 31 this year to 32,708 tons, against 26,062 tons in the corresponding period of 1870. Rouen also imported 89,582 tons to July 31 this year, against 68,912 tons in the corresponding period of 1870. The exports to all the other leading centres of consumption present, however, a considerable decrease this year, Bordeaux figuring for 119,086 tons to July 31, against 150,404 tons in the corresponding period of 1870; Boulogne, for 46,625 tons, against 49,470 tons; Caen, for 50,235 tons, against 66,384 tons; Calais, for 17,704 tons, against 60,410 tons; Charente, for 23,757 tons, against 25,930 tons; Dieppe, for 94,433 tons, against 132,034 tons; Dunkerque, for 11,074 tons, against 59,887 tons; Havre, for 119,329 tons, against 156,827 tons; Honfleur, for 25,250 tons, against 32,934 tons; La Rochelle, for 24,414 tons, against 37,065 tons; Marseilles, for 16,899 tons, against 44,166 tons; Nantes, for 34,009 tons, against 49,384 tons; St. Nazaire, for 108,641 tons, against 131,407 tons, &c.

FOREIGN TIN.—From an advertisement in another column it will be seen that Messrs. Henry Bath and Son are inviting tenders for about 300 tons of Straits and Malacca tin, in lots of 10 tons each. Considerable interest will be felt in the result from the largeness of quantity, and the circumstance that the Banca sale at Rotterdam is to take place only a week later.

THE MINERAL RESOURCES OF NEW SOUTH WALES.—The value of the coal deposits of New South Wales has long been known, and the improving quality of the coal as the workings become more extensive has brought it so much into favour with those connected with the shipping interests visiting the colony that at present it is preferred in the Australian ports to coal which has been imported from England. But the success which has attended the development of the Newcastle fields should not make the colonists neglect the less favourably situated deposits. It is of paramount importance for the future of New South Wales that the coal fields of the West should be at once developed, in order to prevent the exhaustion of other resources, and to facilitate the opening up of other industries; it is, therefore, much to be regretted that so little consideration in the way of providing cheap transit is given to those disposed to speculate in the development of the Western mines. It should be remembered that whatever tends to establish new centres of industry in the interior must increase the prosperity of the existing cities, the traffic on the railways, and the general wealth of the colony, and that an abundance of cheap coal is the greatest possible incentive to industrial enterprise; but the earlier works connected with coal mining are so expensive and unremunerative that every possible encouragement should be given, both by private individuals and by the Legislature, to those who are bold enough to become the pioneers in so useful a kind of labour.

NEW SOUTH WALES—THE WESTERN GOLD FIELDS.—Prospecting parties who have chosen the Western gold fields as the place for operations have been highly successful. One of our correspondents, a practical miner of considerable experience, writes—"I have been away gold prospecting for a month, and I and others have taken up some land adjoining claims yielding 4 ozs. of gold to the ton. We have to go about 70 yards to cut the same reef in our land, and I am just leaving for the place to commence sinking. I will without fail send you next month some interesting information on the Western gold fields and other mining matters. There appears to be more gold mining speculations setting in in Sydney just now, owing to rich finds of gold at Gulgong, Hill-end, Tambaroora, Carcoar, &c. The last extension on the Great Western Railway having assisted very much to develop our Western gold fields, Victorian and New Zealand miners can now come 110 miles from Sydney by rail, and great numbers have lately come to the new rush at the Gulgong alluvial diggings near Mudgee."

IRISH MINES.—A correspondent writes—"Mines in the South-West of Ireland have hitherto not enjoyed that extent of British support which their intrinsic merits so well deserve, and their abundant and rich resources will so amply repay when they are worked with judgment and adequate capital. In general they have been only partially operated on, and not fully developed, with the exception of the Berehaven Copper Mines, near Bantry Bay, the Cappagh, and the Ballycunnimmin Copper Mines, also in the county of Cork. Many other equally productive mines in that county were closed during the period of the famine and pestilence of 1847, and, with the exception of the above mines and two or three others, none have been re-opened but those for speculative operations in 1852 to 1857. This county abounds in minerals of every sort—mines of iron ores, manganese, lead, slates, besides copper ores of the richest quality, that only require capital to make them productive of lasting benefits to the parties and companies working them."

MINING GLOSSARY.—The third edition of the Glossary of Mining and Smelting Terms has now been printed, and contains carefully-compiled lists of the technical terms used in the mines of Cornwall, Derbyshire, South Staffordshire, Newcastle, and Spain; and of the smelting terms used in France and Germany. The book, which will be found extremely valuable to those interested in mines, desiring thoroughly to comprehend the agents' reports, will be forwarded from the *Mining Journal* office, 26, Fleet-street, E.C., on receipt of 2*s.*, or may be obtained, by order, through any bookseller or newsagent.

DOMINION OF CANADA OILS REFINERY.—The works of the Dominion Oil Refining Company are being pushed rapidly; their dock is finished, we presume, by this time, as the work was nearly completed on Saturday when we were down. It is a very solid structure, 235 ft. long, and 39 ft. wide, all the piles which are very close, being driven 15 ft. into the solid clay. None of the machinery has been brought down from Port Edward yet, but the most of it has arrived, we learn, arrived there. The Customs officials want it all to arrive before

they commence checking the parcels. The specimen brick-kiln, burnt a few days ago, turned out excellent building brick. They are now preparing to burn another kiln of 200,000, which will be ready to be placed in the wall about the beginning of next month, when the same foundation will be ready for them. The brick is made on the spot, all the clay and sand necessary being found in abundance on the company's property. We may state that the brick made is considerably heavier than the white brick made up the lake, weighing 1*1/2* lb. more each, and very hard besides.—*The Sarnia Canadian*, Aug. 23.

REPORT FROM SHROPSHIRE.

The Lawton Ironworks, which we stated had been taken a short time ago, have been put into repair, and are now in operation. The new works of Nettlefold and Chamberlain, at Hadley, the puddling-furnaces of which are to be heated on Siemens' regenerating gas principle, are also in a state of readiness; two of the furnaces, at least, are expected to be in operation in a few days.

At Broseley a large body of water, which is known to lie in the old hollows, particularly in the neighbourhood of one of the great faults of the field, has been accidentally tapped, and has flooded some of the pits to such an extent as to suspend operations. There is no pumping-engine on the Broseley side of the Severn, yet Broseley suffers more inconvenience, probably, than any other town in the kingdom from a scarcity of water.

Last week we had to record the visit from the Iron and Steel Institute—the heads of the more advanced concerns of the kingdom came to see what may not inaptly be called the cradle of the trade, and we believe they were gratified with the result of their visit. Since then the members of the South Midland Institute of Mining, Civil, and Mechanical Engineers have visited the principal collieries of the Lilleshall Company. The party was met by Mr. E. Jones, one of the vice-presidents of the society, and conducted over the Prior's Leo furnaces and collieries. After inspecting the Hollinswood furnaces they proceeded to the Stafford pits, the last and most extreme sinking to the east of the field. Some time was spent here, and Mr. Jones then conducted his visitors across the fields, where the surface, which is as yet unbroken, is covered with the stubble of the recent harvest, but beneath which for two miles a richer harvest of mineral wealth is being gathered, unbroken by any considerable faults, and with a thousand yards of face open in each of the workings; they are all on the long wall system, and are ventilated at the rate of 50,000 ft. per minute. The Stafford, the Grange, and the Granville pits are raising from 5000 to 6000 tons of coal for each pair per month, and one pair, the Woodhouse, which were abandoned some years ago from having been "worked out" as was

their way back, and were similarly entertained in their own village. The masters and maidens took tea together in the Mechanics' Institute, and subsequently a large number enjoyed themselves in a variety of games, dancing, &c. Mr. WILLIAM BAILEY, late manager of the Kilburne Colliery, near Belper, has been presented with his portrait, value £50., by Mr. J. H. Wooley, on behalf of the men employed at the colliery. Mr. Wooley said from the commencement of the Kilburne working up to the present time the relationship existing between the workmen and himself had been one of unbroken friendship. The collier at Kilburne had always felt that attention was paid to his life, so as to make the danger of his occupation as little as possible. By his own Christian life and character he had exerted a visible and powerful influence in the village of Kilburne. The workmen took that opportunity of giving expression to their deep regret that a connection extending over so many years had at last been severed. Mr. Bailey, who had been manager of the colliery for 38 years, suitably replied.

THE COLLIERY EXPLOSION NEAR WIGAN.—At Wigan, on Thursday, Mr. C. E. Driffield, coroner for the district, opened an enquiry into the cause of the calamity. Mr. W. Crompton (Crompton and Shawcross), colliery proprietor, is foreman of the jury. The sitting was attended by Mr. T. Knowles, one of the partners in the firm owning the colliery; Mr. W. Pickard, miners' agent, and others. In the course of a conversation which took place before the jury were sworn, Mr. Knowles informed the coroner that the witnesses available would include a person who was placed over all the underlookers in the employ of the firm, and who had been through the mine on the morning of the explosion. The underlooker, who left the nine-fifths a few minutes before it fired, could also be examined; and there was a man named Wright, who was the only collier not at work that morning, and who had lost two sons by the explosion. There was only one turn of men employed, and on the Monday the men had been holding a great meeting in Wigan. On Tuesday only five went to work, and no doubt this would account for so many being down on the Wednesday—the day of the explosion. They were anxious to make up for lost time. Mr. Pickard, replying to the coroner, said this was the fifth large explosion which had happened in the same mine in the South-West Lancashire district. There had been, in addition to the one at the Moss Pits, two at Haydock, one at Bryn Hall, and one at Low Hall.

Mr. Knowles, one of the owners of the colliery, said the firm did not intend to be represented by any solicitor at the enquiry. They were only anxious that the plain, simple truths might be got at, and that the great mystery which at present shrouded the affair should be cleared away, so that they might be able to avoid anything of the kind in future.—Witnesses having been called to identify the bodies of the two persons who had died after being brought out of the mine, Mr. Knowles, replying to questions from the jury, said his own impression was that the fire was out, but he should like to be fortified by the opinion of some eminent mining engineers. It was certainly impossible to save any lives now, and it would be a very serious matter if the pit were opened too soon. Some time next week he thought it very probable the pit would be opened, and from a report he had from the principal underlooker, in whom he had implicit confidence, and who was down after the explosion, he did not think there would be much difficulty in getting at the bodies if the fire was out, as he had no doubt it would be from the state of the temperature. The shafts were not damaged very greatly, but what injury had been done showed that the explosion had been most terrific.—Mr. Pickard said that when he went down after the explosion he took care to look up from the bottom to see in what state the shaft was. He thought it would soon be put right. The archway at the bottom, too, was not much damaged.—After some further conversation the enquiry was adjourned.

REPORT FROM SCOTLAND.

Sept. 12.—The warrant market was somewhat irregular last week, and rose from 60s. 4½d. on Wednesday to 61s. 4½d. on Friday. On Monday we opened with a dull feeling, and business was freely done at about 60s. 6d. cash. To-day we have had again an irregular market. In the forenoon a few lots were done at about 60s. 4½d. cash. Late 'Change opened flat, at 60s. 2d. cash, and 60s. 6d. one month accepted, but before the close the price rallied to 60s. 4½d. cash, with buyers over, sellers asking 60s. 6d. ten days. No. 1, g.m.b., 61s. 6d.; No. 3, 60s. 6d. The shipments have for the past three weeks been on a more moderate scale, but they still compare favourably with the returns at the same period last year, when the export trade was so much curtailed by the effects of the war panic and the blockade of the German ports. Makers' iron remains pretty firm, but any alteration in prices is in the favour of buyers:—

	No. 1.	No. 3.
G. M. brands at Glasgow (deliverable alongside).	61s. 6d....	60s. 6d.
Gartsherrie ditto	62 6	62 0
Coltress ditto	62 6	62 6
Summerlee ditto	62 0	62 0
Carnbroe ditto, ex store.	63 0	62 0
" at Port Dundas	65 0	62 6
Lanloan ditto	65 6	62 6
Calder ditto	67 0	60 0
Glengarpoak at Ardrossan	66 6	62 0
Dalzellington ditto	62 0	61 0
Eglington ditto	62 6	61 6
Carson at Grangemouth	59 0	—
ditto (selected)	65 0	—
Shotts ditto	65 6	61 6
Kinnell at Boness	64 0	59 0
G. M. brands at Middlesborough	85 0	70 0
Bar iron	28 5	28 10
Nail rods	8 10 0	—
SHIPMENTS.		
For the week ending Sept. 9, 1871	Tons 14,085	
" Sept. 10, 1870	10,077	
Increase	4,008	
Total increase since December 25, 1870	133,202	

There has only been a limited business done in Finished Iron since the advance, with a cessation in the enquiry, but makers hold firmly to the new quotations, although they are yet mostly engaged on contracts deliverable at previous rates. In fact, there is every probability of another advance before long, as the Scotch puddlers are still dissatisfied with their wages, and have held several semi-private meetings for the purpose of arranging for agitating for a further advance of 5 per cent. when matters are ripe for it. In the meantime, the works are sufficiently busy with mixed orders for bar, ship, and boiler-plates, nail-rods, galvanised sheets, hollow ware, pipes, railway chairs, &c.

The Scotch coalmasters have had a run of two or three months of brisk trade, and they cannot now complain of prices since the advance. The prices, f.o.b., at the Broome law, is—Main, 7s. to 7s. 6d.; split, 8s.; best household, 10s.; burnt coal for steamers, 11s.; coke, 18s. to 20s. per ton, less discount as arranged. During the week the shipments have been very heavy, 42,917 tons having been sent foreign and coastwise, against 24,034 tons in the corresponding week of last year, a total less than the foreign shipments exported this year. The colliers' wages average 4s. 6d. per day, but a few masters who have fine household coal pay 5s. a day, and by that means get the pick of the men—hands who are more economic in their working, and more steady in their habits. With the exception of the pits at Clippens—Johnstone district—miners who have lifted their "grath" have all returned to their work, the advance having been conceded to them. The Fifeshire miners have been promised an advance—they asked 1s. a day, but the master will likely be compromised by the masters granting 6d.

Messrs. Merry and Cunningham, who we noticed last week as having purchased the coal works of Dr. Robertson, at Blaibardie, Renfrewshire, have also purchased that gentleman's lease of the coal and ironstone in the lands of East and West Drumchapel, Cardenhill estate, which he lately acquired. Regarding the blackband ironstone referred to last week, we learn it was discovered some time ago by Dr. Robertson in sinking one of his pits at Blaibardie, but it has only lately been developed and opened out. The seam, in quality and thickness, considerably surpassed his expectations, and it has now been found to extend to the adjoining lands of Drumchapel, which have been sold by him, as above noted.

The proposed College for Technical Education in Glasgow has now been advanced somewhat, and the committee aim at raising a sum of not less than 50,000£. for carrying it into effect. The branches are to include mining and metallurgy—coal, iron, and other ores; the construction of furnaces, machinery, &c., in connection with the working of metals, and generally whatever education is necessary to give a complete scientific knowledge in this department. It is proposed to hold the classes in the evening, and this we regard as a *sine qua non*, if these classes are intended to be of general utility.

IMPORTANT MODIFICATION OF THE STEAM-ENGINE—REPEATING POWER.—An operative mechanic from the West claims to have discovered an entirely new method of applying the power of steam to give a second or repeating impulse to an engine. The engine itself, which has been exhibited in Edinburgh in working gear, is constructed upon an entirely new form, and gives out its required power in a style hitherto only partially successful. Mr. Wright, the inventor, affirms that he has applied an entirely new principle to the construction of the rotary engine—a principle by which he is enabled not only to dispense with the connecting-rods, slides, crank, &c., of the old alternate motion, but to so economise his steam-power as to make each induction capable of being used on one, two, or three successive surfaces. The inventor, we understand, has secured a patent for his engine, and is being assisted financially by a number of gentlemen in Edinburgh. Mr. Wright explains that by his mode of construction "six dif-

ferent powers can be obtained in one piece of machinery if constructed on the principle of double action. These engines are capable of using successfully the steam a second time, and this before the steam passes into the low-pressure pistons, and dispense with all the complications necessary in those at present in use. The engines themselves are very light, occupy little space, have greater power with less steam, and can in every way be constructed and kept up at one-half the ordinary expense, for the reason that all internal work can be renewed a few hours even at sea." He states further that he is "prepared to superintend the construction of an engine which will excel any either for marine or traction purposes, and is also prepared to make them work with equilibrium air-pumps, which will dispense with all the drawback caused by the vacuum on the bucket, and give a new additional power, still leaving as good a vacuum." Mr. Wright states that he has constructed two engines on his new system, and that these have worked quite satisfactorily. In answer to a communication which he has made on the subject to the Admiralty, their lordships have asked him to send models for their consideration, but the want of sufficient funds has in the meantime prevented Mr. Wright from fulfilling this request.

REPORT FROM THE NORTH OF ENGLAND.

Sept. 14.—Since our last report the trade of this district has not undergone any particular change. In the meantime the returns of the Cleveland Ironmasters' Association has been issued for August, and from this we observe that the make of pig-iron last month was 157,053 tons, being nearly 12,000 tons more than was made in August last year, and 1073 tons in excess of July this year. Shipments of pig-iron from Middlesborough to foreign ports last month were 28,570 tons, against 6923 tons in August, 1870, the great difference being caused, of course, by the war. Coastwise deliveries were in August this year 20,582 tons, or 7644 tons more than the corresponding month of 1870. Notwithstanding the increase of 1073 tons in the make of pig-iron, and the occurrence of the holidays during the month, together with the broken time caused by the excessive heat, when the men were unable to work, there was a decrease in stocks at the end of last month, as compared with July 31, of 1873 tons—959 tons in makers' stocks, which now amount to only 90,127 tons; and 864 tons in warrant stores, which stock is but 622 tons. There are given in the return 127 furnaces in Cleveland, 122 of which are in regular blast. This number will be increased by the commencement of the Lackenby Iron Company's two new furnaces, which are, we understand, to be blown in on Monday or Tuesday. They are situated near to Middlesborough, and are fitted up with all the latest improvements. The demand for pig-iron is still active, though it is scarcely so great as it was a fortnight ago; prices remain firm, and have not experienced any change in consequence of the recent alteration in the Glasgow rates. Most makers are being pressed for the fulfilment of contracts, but in many instances buyers are obliged to wait longer than is agreeable to them. Deliveries are heavy throughout the district. Foundry consumption is slightly increased, and it is likely to continue somewhat heavy for many weeks to come, judging from orders reported to have been received in the neighbourhood lately.

In the Manufactured Iron departments business continues in a prosperous condition. There is a good demand for shipbuilding iron, of which a large quantity is regularly being made. The orders for iron ships are reported to be very numerous, and new contracts for steamers have been made within the past week or two by builders on the Tees, and also further north. For rail material there is a fair enquiry, and the prospect for the winter season is generally thought to be pretty promising. The larger houses in the district are in possession of plenty of work to keep them going for the present, but whilst some of them have orders on their books to carry them into winter others are not so favourably circumstanced, but from the present state of the market there seems every probability of fair employment for rail-mills for some months to come. In bar-iron there is much activity at this season of the year, principally for shipping orders. In the coal and coke trades there is a general activity.

TRADE OF THE TYNE AND WEAR.

SEPT. 14.—The imports into the Tyne and Wear have again been very large, consisting of esparto grass, timber, iron ore, &c. The coal turns still continue long, but, as the Welsh strike has terminated and the export trade is much slacker, soon the trade must become more quiet. The new deep winning at Wardley has progressed rapidly lately. At the first shaft the Bensham seam (a good house coal) is being worked, and at the second shaft a lower seam has been proved—that is, the Wear Main—at the depth of about 20 fathoms. This seam is an excellent steam coal. This shaft is now being pumped down further, and the famous Hutton seam, a first-class gas coal, is expected to be reached soon. All the feeders of water met with at the shaft have been tubbed back, and water only is pumped to supply the establishment. The stratum being sunk through is perfectly dry. The new winning at Heaton has also progressed well lately, and most of the feeders of water have been successfully tubbed back, so that little interruption is now expected to be met with in sinking to the famous seams of house and other coal found in that locality. A large number of houses are to be erected here for the workmen at the new winning. The new winning at Sileworth also continues to progress satisfactorily, although a considerable distance has yet to be sunk before reaching the Maudlin seam there.

A new company has been commenced here called the Felling Iron, Coal, and Chemical Company. The object is to take over the iron-works of Messrs. Frazer, Roberts, and Co., the chemical works of the same firm, and also the flourishing colliery adjoining, at Felling. The capital to be raised is 200,000£., and there can be little doubt of the complete success of the company, if the character of the works be considered. The iron-works of Messrs. Frazer are of quite modern construction, and consist of puddling-furnaces, rolling-mills, &c., and an excellent business has been established and carried on here some time; the works are most favourably situated for railway and sea transport, being on the bank of the River Tyne, about two miles below bridge, and about one mile from the North-Eastern Railway, with which the Felling Colliery branch line communicates. The Felling Colliery is situated within a few yards of the North-Eastern Railway, and is connected with the main line by a short branch, and a private line also extends from the colliery to the River Tyne, where the coals are shipped. During the past few years this colliery has been vastly extended and improved. The old Hutton seam, which was the only one worked for many years, produces first-class gas coal, and a considerable tract of additional royalty has been secured, so that this seam will continue to be worked many years for this coal. A sinking has been made, 80 fms. below this seam, to the famous Busty seam, a first-class coking coal, and the seam is now worked, and also the fire-clay which is beneath it. A number of coke-ovens have been erected, and some excellent coke is at the present time being made from this seam, and also fire-bricks. Above the Hutton seam there are two good steam coal seams entire, and both those seams have been opened out, and are now regularly worked, so that we have here steam, gas, and coking coal in quantity almost inexhaustible. A new winding-engine of modern construction has been erected, and is nearly ready for working. Of course when this is started the quantity raised will be largely increased. The whole concern is brought forward under the auspices of Mr. George Elliot, M.P., and several other influential local gentlemen connected with the coal and iron trades.

The Iron and General Engine Trades continue extremely good, and it is clear that there is no lack of spirit in the trades, for spite of the strike extensions are in progress at some of the works. At Black Hawthorn Works, Gateshead, considerable additions are being made to the fitting and erecting shops. All the foundries and ironworks are fully employed, and, of course, at those works, where the men have not been out, a good deal of overtime is worked. But the number of men at work is gradually increasing at all the works without exception, being daily augmented by the arrival of men from abroad, and the old hands are also going in. Upwards of 1200 men are now at work at Elswick, and considerable numbers are also at work at the other concerns. Assault cases still are very frequent, and a number of strike hands have been sent to goal for various periods.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Sept. 14.—The demand for coal and slack is buoyant for the season in all the leading districts of Staffordshire, and quotations show a satisfactory degree of firmness. In the Cannock Chase field several new leases have just been granted by the Marquis of Anglesey, the lord of the manor, and additional workings will be at once opened out in that thriving and enterprising district. In the Black Country the demand is particularly active for Thich coal, and as winter approaches prices are getting firmer. In the opinion of many, a formal advance in quotations, as well as in the wages of colliers, will be declared shortly throughout the South Staffordshire coal field. Ironstones are in satisfactory demand, and prices are increasing in firmness, especially for native ores.

The Iron Trade continues active both in the pig and finished departments, although transactions have been considerably interrupted during the past fortnight by the agitation among the millmen for advanced wages. There has been no lack of orders in the market, but makers have not cared to book heavy contracts for forward delivery at existing rates. There is, moreover, for the present a very fair supply of orders on the books of all the leading firms. The makers of gas, strip, small rounds, hoops, and thin sheets for galvanising, are especially busy; and as many of the specifications are on export account, there is great activity at the mills and forges in the clearing up of orders for the shipping season just about to close. The pig-iron makers are busy, and are not booking new orders, except at an advance of 2s. 6d. to 5s. per ton. This advance is not entirely owing to the improvement in demand, although that is considerable; but it is due in a great measure to the increasing value of hematite and other ores. It will thus be seen that the advantage gained by the makers is not so great as is generally believed. We hear of several additional furnaces as likely soon to be put in operation, among them being the new one which Mr. Rose is building at Moxley, near Bilston, which is very spacious, and fitted with all the newest scientific appliances for consuming waste gases, and otherwise economising production.

The Hardware Manufacturers in the Black Country continue to report a very fair supply of orders for all the leading classes of product, the demand being especially conspicuous for machine castings, and various descriptions of wrought-iron work for constructive purposes. Gas tubing finds a ready market on the Continent, some very extensive orders from Paris being reported to repair the work of destruction by the besiegers and the Communists in the early part of the year. A single order for 500 tons of this class of produce is in course of execution in the district on account for Paris, and many of its

extents have been placed during the last few weeks. The newly-erected tube factory of Messrs. Brown and Co., Wednesbury, commence operations next week.

The Shropshire industries are all active. The great Lilleshall Iron Company are quite oppressed with orders, as well in the machine shops and foundries as at the blast-furnaces. On Tuesday the first of a series of gas furnaces, on Siemens' principle, was started near to the Lilleshall Works, at which the firm of Messrs. Chamberlain and Co., the extensive wood screw manufacturers, of Birmingham, will manufacture their own wire, chiefly from pig-iron of the Lilleshall Company. This will introduce a new manufacture into Shropshire. Everything about the new establishment has been executed upon the models most approved by the best metallurgical chemists and mechanical engineers. Economy of fuel and economy of labour distinguishes all that has been done; and Siemens' furnaces have been made increasingly effective by certain alterations in detail suggested by the engineer to the Lilleshall Company, Mr. J. Lloyd, and approved by Mr. Siemens.

The valuable freehold mineral estate, situated at Cradley, near Stourbridge, Worcestershire, was offered for sale by Messrs. Oates, Perrins, and Woodbridge, at the Talbot Hotel, Stourbridge, on Friday. The estate comprised over 31 acres of arable land, with suitable homestead. It is believed to contain Brooch, Thick, and other measures of coal and ironstone of the South Staffordshire coal field; also a Stourbridge fire-clay seam. It is in a populous locality, where there is a very large demand for coal for manufacturing and household purposes, which demand is at the present time increasing to a great extent in consequence of the exhaustion of the coal fields of the adjoining districts. The property was bought for 14,500£. by Mr. James Holcroft, a well-known South Staffordshire coal and iron master.

REPORT FROM MONMOUTH AND SOUTH WALES.

Sept. 14.—Judging from the energy with which operations are carried on at the works, the Iron Trade might be pronounced prosperous; but appearances are deceptive, as there have been only comparatively trivial transactions entered into for the last three or four weeks. This arises principally from the unwillingness of buyers to give higher prices, and the hesitation of manufacturers to accept new orders at the old rates; but this state of things, it is to be hoped, will be at an end as soon as the Quarterly Meetings of the trade are held. The clearances to the United States, Canada, and some of the continental markets still continue on a large scale, but there is, perhaps, a slight falling off as compared with a week ago, the iron being shipped direct from the works. Proportionate quantities of rails, bars, and plates are included in the orders being worked off. About the same business is being done on home account as for the last two or three weeks. Pig-iron is largely produced and consumed in the district. The position of the Tin-Plate Trade continues satisfactory. The demand is extensive, and prices are improving.

It cannot be said that employment at the steam coal collieries is going on with the desired regularity, and it is evident that it will be some weeks before the men will settle down properly to their work. Several rather serious disturbances have occurred between the new hands from Staffordshire and elsewhere who remained in the district and the old colliers, and the result has been that very little work has been accomplished for some days past. A vague notion seems to prevail among the men that the masters are not sincere in their determination to submit all matters in dispute to arbitration. What ground there can be for this singular arrangement it is difficult to see, for the masters have not in any way departed from the arrangement made by the men a fortnight ago. An arbitration, the importance and issue of which will affect the prosperity of many thousands of people, cannot be undertaken in a day, and the men should remember that reasonable time must be allowed for the arbitrators to make their arrangements, and for the necessary preparations to be made to obtain evidence. As the receipts of the local railways will show, however, there has been a considerable increase in the quantity of coal sent to the ports for shipment, but there is still room for a large increase in the output. Until the arbitration is over it is tolerably clear that the men will not work with the usual steadiness. In the house coal trade there is about the usual business doing.

Dissatisfaction is now beginning to be freely expressed among the men employed by the ironmasters at the rate of wages they are receiving. A meeting of delegates, representing about 35,000 iron and coal workers, has been held in Monmouthshire this week, and it was resolved to make a determined and combined appeal to the masters for an advance of 10 per cent. upon the present rate of wages. The men contend that it is full time that the rate of wages which prevailed previous to the great panic of seven years ago should be re-established. A general reduction of 10 per cent. was then made by the masters, and it has never since been restored. The more reasonably disposed of the men think that when the masters see how strong, determined, and wide-spread the movement is that they will listen to the appeal, and grant the advance asked for. It is difficult, however, to see how an advance of 10 per cent. can be granted in wages, unless there is a proportionate rise made in the price of iron. The agitation will by no means cease to improve the position of the ironmasters in regard to business.

With the exception of the coal shipments from Cardiff, the trade of the local ports for last month bears favourable comparison with that of the corresponding month of last year. Proceedings were this week taken against the proprietors of the Abertillery Tinworks for employing boys under age, contrary to the provisions of the Factories Act. Mr. E. B. Fitten, sub-inspector, prosecuted, and there were altogether 21 cases to be heard: eighteen of the cases were, however, withdrawn, and the other three were admitted, and some extenuating circumstances were pleaded. The magistrates inflicted a fine of 20s. and costs in each of the three cases, and ordered payment of costs in the others. A similar charge was instituted against the Tredegar Iron Company, it being proved that a lad under 13 years of age was employed as hooker-up in the puddling. A fine of 20s. was imposed on the company, and the father of the lad was fined 10s. and costs for not sending him to school.

The arrivals at Swansea include—the Bernigo, from Bilbao, with 235 tons of iron ore, to order; Albyn, from Bilbao, with

**THE
LANESTOSA LEAD AND ZINC MINING COMPANY
(LIMITED).**

Incorporated under the Companies Acts, 1862 and 1867, by which the liability of shareholders is limited to the amount of their shares. Capital £24,000, in 12,000 shares of £2 each.

10s. per share to be paid on application; 10s. per share on allotment; the remainder to be called up as required, but no call to exceed 5s. per share, and calls not to be made at less intervals than three months.

DIRECTORS.

WILLIAM COX, Esq., Chairman of the Linares Lead Mining Company (Limited).

JOHN P. JUDD, Esq., Chairman of the Alamillos Company (Limited).

ROBERT HENTY, Esq., Directors of the Linares, Fortuna, and Alamillos Companies.

JOHN TAYLOR, Esq., Directors of the Linares, Fortuna, and Alamillos Companies.

RICHARD TAYLOR, Esq., Director of the Fortuna and Alamillos Companies.

FREDERICK W. BIGGE, Esq., Director of the General Mining Association.

MANAGERS.

Messrs. JOHN TAYLOR AND SONS, 5, Queen-street-place, London, E.C.

BANKERS.

Messrs. BARNETTS, HOARES, HANBURY'S, and LLOYD, 60 and 62, Lombard-street, E.C.

BROKERS.

Messrs. HILL, FAWCETT, and HILL, 29, Threadneedle-street, London, E.C.

SECRETARY—HENRY SWAFFIELD, Esq.

OFFICES—5, QUEEN-STREET-PLACE, LONDON, E.C.

ABRIDGED PROSPECTUS.

This company is formed for the purpose of acquiring and working the lead and zinc mines of Lanestosa, in the province of Vizcaya, in the North of Spain.

The property for which a provisional agreement to purchase has been made, consists of—1st, 10 concessions containing an area of 187 acres, constituting the existing Lanestosa Mines, with the plant, tools, and all ores and materials existing; and 2nd, additional concessions of 200 acres, the right to which has been recently acquired by the vendors.

The mines are situated near the village of Lanestosa, and about 40 miles west of Bilbao, and 10 miles from Limplas, the port of shipment. The climate is good, and an abundant supply of labour can be obtained at a very cheap rate, a large number of miners residing on the spot. The ores can be forwarded from the mines to Limplas, and thence to Swansea, at a cost, including carriage, storage, and freight, of 18s. per ton.

Extensive deposits of calamine, or zinc ore, exist in six of the concessions, from which more than 20,000 tons have been extracted, yielding a considerable profit. These will be explored, as they have not hitherto been, by systematic works, and will, it is expected, yield good returns; but the purpose for which more particularly this company is formed is to explore and work the lead lodes which exist in the other concessions.

Mr. Etchats, the engineer who has made a special survey of these mines on behalf of Messrs. John Taylor and Sons, lays great stress on the evidence afforded by the immense remains of ancient workings, as well as on the indications presented by the lodes at the surface.

Mr. Etchats states that in nearly every part of Spain where modern operations have been carried on below the deepest workings of the ancients they have led to profitable results. The Linares, Fortuna, and Alamillos Mines furnish satisfactory proof of this, as it was on the faith of such evidence of ancient workings that all of those mines were re-opened by the present companies.

The possession of the property by the present company dates from Sept. 1, 1871, all expenses up to that time being discharged by the vendors.

Copies of the reports of Mr. Etchats and of Captain Gifford, who has been in charge of the mines for the past 18 months, may be seen at the offices of the company.

The only contract entered into is a contract dated August 19, 1871, between James Coxon Richardson of the first part, Alfred Reed and Gregory Rhodes of the second part, and John Taylor, on behalf of the company, of the third part; the company has thereby acquired all the respective interests of the vendors in the above-mentioned concessions for £8000, of which £3500 is to be paid in cash upon the title being properly vested in the company, the vendors agreeing to accept for the remaining £4500 3000 shares, with 30s. per share considered as paid up. When calls have been made to that extent on the remaining 900 shares, these 3000 shares will be liable in common with them for the balance of 10s. per share.

Applications for shares must be made, accompanied by the deposit of 10s. per share, on the form annexed to the prospectus, and can be sent either to the bankers, brokers, or to the secretary at the offices of the company.

Upwards of 5000 shares, in addition to the 2000 shares taken by the vendors, have been already subscribed.

Prospectuses and forms of application for shares can be had of the secretary at the offices of the company, 5, Queen-street-place, E.C., London; or of Messrs. Hill, Fawcett, and Hill, the company's brokers, 29, Threadneedle-street, London, E.C.; or of Messrs. JOHN TAYLOR AND SONS, 6, Queen-street-place, London, E.C.

By order of the board, HENRY SWAFFIELD, Secretary.

London, 14th September, 1871.

**LYNCLYS LEAD AND COPPER MINING COMPANY
(LIMITED).**

To be incorporated under the Companies Acts, 1862 and 1867.

Capital £12,000, in 12,000 shares of £1 each.

On application, and 5s. on allotment.

Calls not to exceed 2s. 6d. per share, and not to be made at intervals of less than three months.

DIRECTORS.

To be chosen at the first general meeting of subscribers for shares. BANKERS—Messrs. ROCKE, EYTON, and Co., Shrewsbury.

SOLICITOR—Mr. HENRY MORRIS.

SECRETARY—Mr. H. J. BADDELEY, Pontesbury.

OFFICES—SWAN HILL, SHREWSBURY.

PROSPECTUS.

The company is being formed with the object of working the lead, copper, and other minerals under land situate at Lynclys, near Oswestry, Salop.

The area of the land under which the right to work has been reserved is about 300 acres.

The property is most conveniently situated in proximity to the Lynclys Station on the Cambrian Railway System, and a peculiar feature in it is that adit levels can be driven, and the mines worked to a very considerable extent, without the aid of steam power, thereby enabling the company to further test and develop the property at a very moderate expense.

The value of the property for mining purposes has been ascertained by operations carried on for some months, which have proved the existence of five large well characterised mineral lodes of lead, copper, &c., and a bed of oxide of iron.

The promoters have had the property examined and reported upon by competent judges, and they append some of the reports.

It may be added that, in addition to the presence of lead, copper, &c., the geological formation of the property is limestone, offering an opportunity for obtaining stone for fluxing purposes, and for converting into lime.

In the allotment of shares preference will be given to those applicants who desire to pay up in full on allotment.

If no allotment be made, the deposit will be returned in full at an early date, without deduction.

Application for shares may be made in the form accompanying the prospectus, addressed to the Solicitor or Secretary.

Shrewsbury, August 21, 1871.

REPORTS.

Aug. 5.—At your request I have carefully inspected the above mine, and beg to hand you my report thereon. The property is situated near Oswestry, in the county of Salop, and comprises a good tract of ground; its geological formation is limestone, through which five known large and well-defined lodes traverse, but hitherto operations have been confined principally to two lodes—namely, the south or Ranter's lode, and the north and south lode. On Ranter's lode, which is bearing near east and west, several pits have been sunk to a depth from 3 to 10 yards, and small drivages made for over 100 yards in length, and for the whole distance I find the lode to contain good stones of lead ore, where goods are now lying at surface, which have been broken in the several pits and drifts. A more promising and encouraging lode cannot be seen so shallow, and I firmly believe, depth is the only thing required to prove this remunerative. This will form a junction with the other lodes passing through the sett. There is also a north and south lode, discovered by sinking a shaft which is 25 yards deep, where large stones of copper and carbonates have been broken. In addition to these lodes there is a bed of oxide of iron running through the sett, which is 4 feet thick, and from 15 to 20 yards wide, which can be sent from the mine at a good profit, being close at surface and in proximity to the railway station, and the total expenditure to send it into the market would be very trifling. I beg to remark that two adit levels can be taken up at the foot of the hill, one on the south or Ranter's lode, and the other on the north or south lode, and I think that both would come in 80 yards deep on top of the hill where they will form a junction, which I look at as a very favourable feature, and the limestone can be saved for burning and other purposes.

In conclusion, allow me to say, I consider you have a property of no small value, and where a vast amount of work can be done without the aid of steam-power, and looking at the several favourable features which the property presents, the prospects are such as to warrant a vigorous prosecution, when I think a small outlay likely to bring it into a profitable position.

JAMES NANCARROW.

August 6, 1871.—This sett is situated near Oswestry, in the county of Salop, and comprises a large extent of ground. There are several well-defined mineral lodes opened out, and lead and copper ores broken in all. I may note two east and west lodes run nearly parallel in the one of which pits are sunk; the lode is 4 ft. wide, producing 1/2 ton of lead ore per fathom, at only 5 fms. in depth, which has a northern underlie, and the other a southern underlie; I believe in going to a depth of 20 fms. or so you will meet with the junction, and a body of lead ore. An adit level can be driven on the course of the lode, which will prove beneficial for the mine and erection of dressing-floors, &c. On the north side of the sett there is a shaft sunk on a north and south lode, which is producing copper mixed with gossan; I should also recommend that an adit level be also driven at this point on the course of the lode; by so doing you will meet with a junction, which no doubt will produce a large body of copper ore, as every indication plainly shows. There is also in another part of this sett a large body of oxide of iron, which can be raised cheaply, the sett being within a distance of one mile of the railway station, and materials can be procured at a reasonable rate. In conclusion, I feel confident in going to a depth of 80 to 100 yards in this mineral ground you will find a large body of lead and copper ores.

JOHN LESTER.

**TITANIC STEEL AND IRON COMPANY
(LIMITED).**

STEEL AND IRONWORKS FOR SALE, BY PRIVATE TREATY.

THE LIQUIDATOR of the ABOVE-NAMED COMPANY is prepared to TREAT for the SALE, by private arrangement, as a going concern, of the WHOLE of the company's VALUABLE FREEHOLD MANUFACTURING PREMISES, known as

THE FOREST STEEL WORKS,

situate at COLEFORD, in the FOREST OF DEAN, GLOUCESTERSHIRE, extending over an area of about SEVEN ACRES, together with all the WORKSHOPS, FORGE, STOREHOUSES, OFFICES, PLANT and MACHINERY; also some valuable PATENTS, LICENSES, and LEASES, including LEASE of DARKHILL and SHUTCASTLE COLLIERIES.

FULL PARTICULARS and orders to inspect the works can be obtained on application to ROBERT FLETCHER, 2, Moorgate-street, London, E.C., the Liquidator; R. WOODWARD, Forest Steelworks, Coleford; or to ALFRED DAVY, Engineer, Sheffield.

The usual business of the company is meanwhile carried on at the works.

IN RE THE CARDIGAN BAY CONSOLS MINING COMPANY (LIMITED).

IN LIQUIDATION.

VALUABLE LEAD MINING PROPERTY, held for an Unexpired Term of nearly Nineteen Years, together with the costly PLANT and MACHINERY now in use on the workings, and in excellent condition, situate in the parishes of GWAR-CWM-BACH, GWAR-CWM-ISSA, GWAR-CWM-UCHA, and PENSARN, in the county of CARDIGAN, WALES, and about nine miles from Aberystwyth, which will be SOLD, BY AUCTION, at the Mart, Tokenhouse-yard, London, E.C., on Tuesday, the 3rd day of October, 1871, at Twelve for One o'clock, by Mr. ROBERT L. CURTIS (the Liquidator).

Particulars, with conditions of sale, may be had of E. G. ELWES, Esq., Solicitor, 8, Furnival's Inn, Holborn; or Capt. RICHARD WILLIAMS, Goginan, Aberystwyth; and of the Liquidator, 8, Union-court, Old Broad-street, London, E.C.

ARMAGH LEAD MINING COMPANY (LIMITED).

IN LIQUIDATION.

TO BE SOLD, BY PUBLIC AUCTION, by MR. F. F. CAMPBELL (Auctioneer, Dundalk), on Thursday, the 21st September, 1871, at Twelve o'clock at noon, on the CREGGAN MINES, near CROSSMAGLEN, DUNDALKE, IRELAND, all the MACHINERY and PLANT, consisting of—

ONE 36 inch cylinder CORNISH PUMPING ENGINE, 5 1/2 ft. stroke, with TWO BOILERS, about 8 tons each.

ONE 16 inch HORIZONTAL ROTATORY CONDENSING ENGINE, 5 feet stroke, with TWO BOILERS, about 5 tons each.

ONE 14 inch cylinder ROTATORY CONDENSING ENGINE, with ONE BOILER, about 6 tons, stroke 5 feet, with winding and pumping gear attached.

ONE CORNISH CRUSHING MILL, rollers 22 inches diameter, with cast-iron raft wheel and fittings, complete—all in excellent condition.

About 45 fathoms 9 inch MAIN RODS, with strapping plates, bolts, &c., and about 80 fathoms 9 and 10 inch PUMPS, all with working barrels, H-pieces, and door-pieces to match, all nearly new.

About 120 fathoms 6 and 7 inch PUMPS, with working barrels and door-pieces complete; also ONE 8 1/2 inch PLUNGER POLE, with pole case, stuffing box and gland.

150 fathoms 10 inch CAPSTAN ROPE, TIMBER, CHAINS, WIRE ROPE, and all the necessary MATERIALS to a going mine.

Capt. BAILEY, Crossmaglen, will show the materials on the ground, and any further particulars required will be given by—

T. CURRIE GREGORY, C.E., Liquidator.

62, St. Vincent-street, Glasgow, August 28, 1871.

PRELIMINARY ANNOUNCEMENT.

THE FISH BURN ESTATE, situate in the Parish of SEDGEFIELD, in the County of DURHAM, belonging to CHRISTOPHER WATKIN, Esq.

THE MANSION of FISHBURN HALL, several FARMS of FREEHOLD LAND, containing in the aggregate about 663 acres, with the valuable SEAMS of COAL, thereunder, and also COPYHOLD ESTATE adjoining, containing about 36 acres.

WILL BE OFFERED FOR SALE, BY PUBLIC AUCTION, at the King's Head Inn, Darlington, in the month of October next.

ALLISON, SON, AND WILLAN, Solicitors, Darlington.

September 14, 1871.

FOR SALE—

15 TONS LOW MOOR IRON, 3/4 square.

15 " GALVANISED CORRUGATED SHEETS, No. 26 W.G.

50 " SPRING STEEL, damaged.

300 " CAST IRON, cold blast.

15 LOW MOOR GUNS, about 5 tons each.

10 TONS LOW MOOR SHOT and SHELL.

2 OLD BRASS.

200 " No. 1 CLYDE and MONKLAND PIG IRON.

APPLY TO— JAMES JONES,

48, TOWER BUILDINGS EAST, LIVERPOOL.

September 13, 1871.

FOR SALE, BY PRIVATE CONTRACT.

ONE 42 in. PUMPING ENGINE.

ONE 30 in. PUMPING ENGINE.

ONE 30 in. STAMPING ENGINE.

ONE 22 in. WINDING ENGINE.

Several good BOILERS, from 8 to 12 tons each.

Also, about 90 fms. of 7 in. FLAT RODS, complete.

A large quantity of PITWORK, from 7 in. to 16 in., and many other articles in general use in mining.

APPLY TO— MICHELL AND JENKIN, Engineers, Redruth.

Now ready, 12mo., cloth limp, price 2s., postage 8d.

FORGE, &c., MACHINERY FOR SALE.

ONE 18 in. by 3 ft. stroke independent high-pressure BEAM ENGINE, quite new.

Several sets 18 in. FORGE TRAINS, as worked.

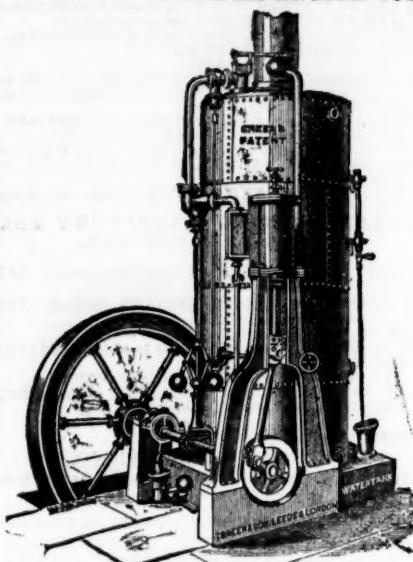
FIFTY TONS of SPARE ROLLS, all sections and sizes.

TWO SETS 8 in. TRAINS AND CONNECTIONS.

TWENTY Cameron's DONKEY PUMPS, 3 in. rams.

GREEN'S PATENT BOILERS,
WITH INVERTED CYLINDER ENGINE COMBINED

Specially adapted for Contractors, Joiners, and Builders, Cabinet-makers, Brick-makers, Workshops, Printing-offices, &c., &c.



FOR EXPORTATION they are invaluable, being sent out in complete working order, ready for immediate use.

The above Engines and Boilers are constructed in an exceedingly substantial and simple manner, every part being of easy access, consequently can be readily understood and managed; they are fitted with governors, equilibrium throttle valve, stop valve, safety valve, feed pump, water and steam gauges complete. The foundation plate answers the purpose of feed water tank, in which the water is heated before passing into the boiler, and also of an ash pit, and no brickwork or foundation is required.

N.B.—Upwards of 600 of these Engines and Boilers are now at work, giving entire satisfaction.

ILLUSTRATED PRICE LISTS free on application to
THOMAS GREEN AND SON,
SMITHFIELD IRONWORKS, LEEDS;
And 54 and 55, Blackfriars-road, London, S.E.

STEEL! STEEL! STEEL!
TO MINE PROPRIETORS, CONTRACTORS, ENGINEERS,
AND OTHERS.

JOHN TURNER'S
CELEBRATED DOUBLE-REFINED CAST-STEEL
FOR JUMPERS AND DRILLS USED FOR HARD ROCK AND MINES.
Best quality at the lowest manufacturer's price. Delivered free.

J. TURNER, SHEFFIELD.
GENERAL DEPOT, AND STOCK OF ALL SIZES AT
FERRY ROAD, MIDDLESBOROUGH-ON-Tees.

References given to Cumberland, Cornwall, Scotland, and Cleveland Mines.

BY ROYAL LETTERS
MALAM AND COMPANY,
ENGINEERS, PATENT.

INVENTORS AND PATENTEES OF PORTABLE AND STATIONARY GAS APPARATUS,
NEW ROAD, ROTHERHITHE,
LONDON.

CONTRACTORS for GAS, WATER, SUGAR WORKS, and DISTILLERIES
on the most improved principles.
Plans and specifications furnished on application.

Also, INVENTORS of APPARATUS for GENERATING GAS from DEAD and other OILS, applicable to every description of FURNACES, FLUES, &c.

I PROVED APPLICATION OF WATER POWER.

THE TURBINE.

Mac Adam, Brothers, & Co.
ENGINEERS.

SOHO FOUNDRY, BELFAST,

After twenty years of experience, have brought their Improved TURBINE to great perfection.

It is applicable to all practicable heights of fall, giving much greater power from the water than any other kind of water-wheel.

On low falls it has the great advantage of not being impeded by floods or back-water.

It is particularly well adapted for situations where the quantity of water is variable, and where all other wheels fail.

Its motion is extremely regular, and, when desired, a Governor can be applied effectively.

This Wheel is at work in a great many places, to which reference will be given.

W. GÜNTHER,
CENTRAL ENGINEERING WORKS OLDHAM,
MANUFACTURER OF MOST IMPROVED
Silent Fans for blowing and exhaust
ing.

" " and Steam Engines combined, for ventilation.
Direct-acting Steam Fans.
Centrifugal Pumps and Pumping Engines.

Turbine Water Wheels, for high and low falls, and variable quantities of water.

Cast-iron Smiths' Hearths.

General Engineering Work.

ILLUSTRATED PRICE LISTS AND REFERENCES ON APPLICATION.

JOHN AND EDWIN WRIGHT,
PATENTEES.
(ESTABLISHED 1770.)

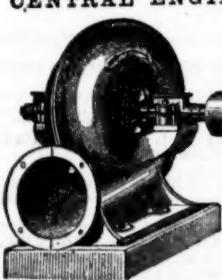
MANUFACTURERS OF EVERY DESCRIPTION OF
IMPROVED
PATENT FLAT AND ROUND WIRE ROPES

From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Worcester and Horsfall's patent steel wire), HEMP, FLAX, ENGINE IRON, COTTON WASTE, TARPAULIN, OIL SHEETS, &c., ATTIC CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM.



AWARDED TWENTY GOLD AND SILVER FIRST-CLASS PRIZE MEDALS.

IMMENSE SAVING OF LABOUR.
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MCADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER, OR ORE-CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

This is the only machine that has proved a success. This machine was shown in full operation at the Royal Agricultural Society's Show at Manchester, and at the Highland Agricultural Society's Show at Edinburgh, where it broke 1½ ton of the hardest trap or winstone in eight minutes, and was AWARDED TWO FIRST-CLASS SILVER MEDALS. It has also just received SPECIAL GOLD MEDAL at Santiago, Chili.

It is rapidly making its way to all parts of the globe, being now in profitable use in California Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials.

The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last 12 months, and Captain Morcom reports most favourably as to the capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.

For the Parys Mining Company,
H. R. Marsden, Esq. JAMES WILLIAMS,

Ecton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.

THOS. GODSWORTHY & SONS,

H. R. Marsden, Esq.

Akali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent.

WILLIAM HUST.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz.

WM. DANIEL,
Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigton.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.

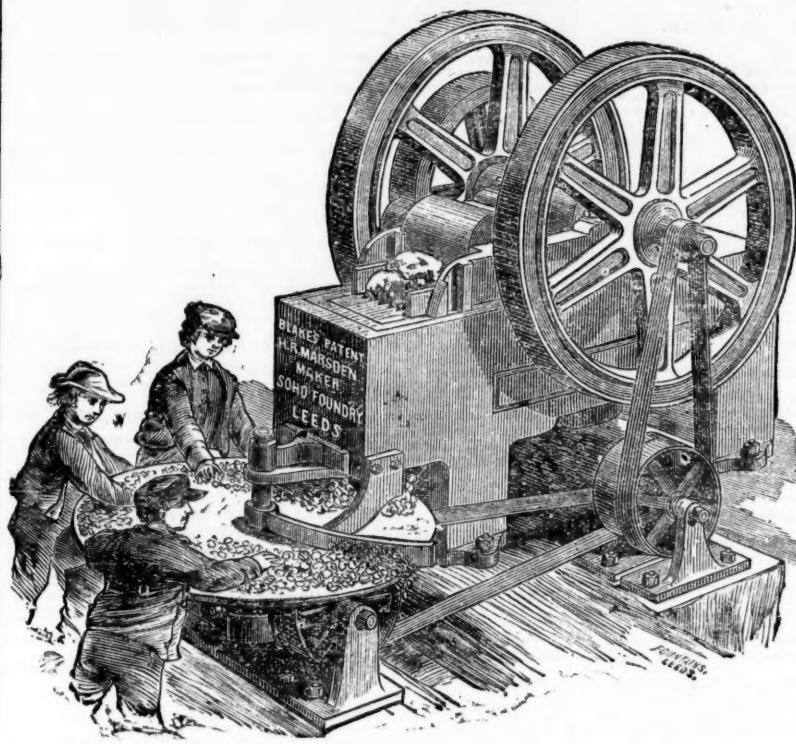
JOHN LANGASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour.

W.M. G. ROBERTS,
General Fremont's Mines, California.—The 11 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate.

SILAS WILLIAMS,
Your stone breaker gives us great satisfaction. We have broken 101 tons of Spanish pyrites with it in seven hours.

EDWARD AARON,
H. R. Marsden, Esq., Weston, near Gunnerton.



For illustrated catalogue, circulars, and testimonials, apply to—

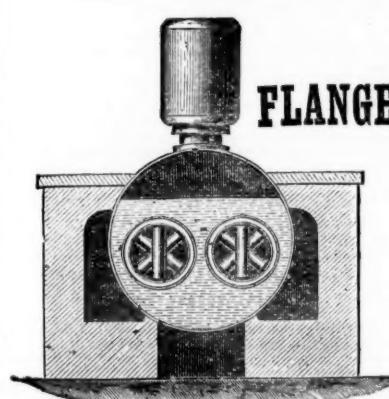
H. R. MARSDEN, SOHO FOUNDRY,
MEADOW LANE, LEEDS,
ONLY MAKER IN THE UNITED KINGDOM.

HAWKSLEY, WILD, AND CO.'S PATENT

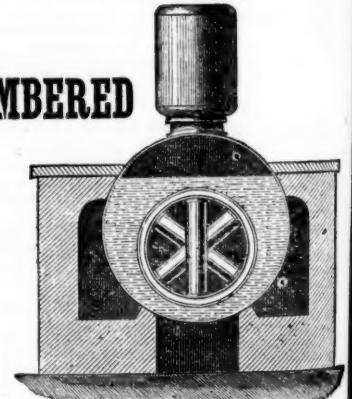
FLANGED & COMBUSTION-CHAMBERED

FLUED

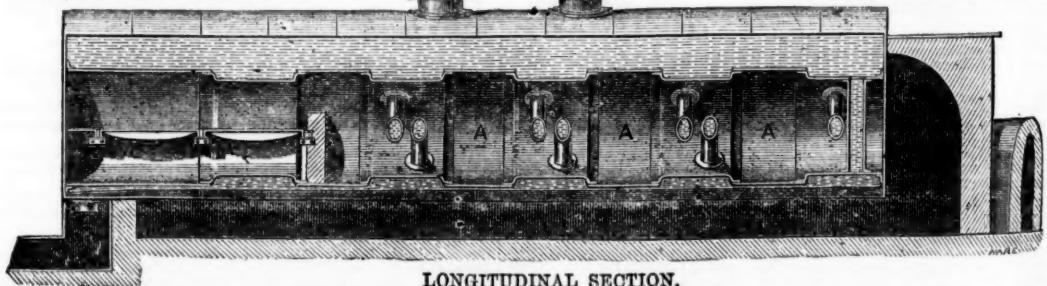
BOILERS.



TWO-FLUED BOILER.



SINGLE-FLUED BOILER.



LONGITUDINAL SECTION.

THE FLUES OF THE ABOVE BOILERS ARE MADE OF TWO DIAMETERS, ONE RING OF PLATES BEING 4 inches less than the other, alternately. The smaller rings being flanged, as shown in drawing, are thereby considerably strengthened, besides securing the most material point—a perfect EXPANSION-JOINT.

The cross tubes are placed in the smaller rings of the flue, so that any one can easily be taken out and replaced.

The larger rings of the flue act as reverberating, combustion, and heat-retaining chambers, greatly economising the fuel.

These Boilers are strong, durable, and economical, and have been at work a number of years with the most satisfactory results.

PATENTEES AND MANUFACTURERS :

HAWKSLEY, WILD, and CO., Engineers and Boiler Makers,
SAVILLE STREET EAST, SHEFFIELD.

CHAS. PRICE AND CO.'S RANGOON ENGINE OIL, AS SUPPLIED TO H.M. DOCKYARDS AND FLEET.

THIS OIL is suitable to every kind of Machinery. As a lubricant it is equal to the best Sperm or Lard Oil, while it possesses the great advantage of being entirely free from any principle which will corrode the metal bearings.

For particular kinds of Machinery, the Oil may be specially prepared of a consistency and character adapted to the nature of the work to be done.

Chemical Laboratory, 7, Printing House-square, Blackfriars, April, 1869.

I herewith certify that the Rangoon Engine Oil, manufactured by Messrs. Chas. Price and Co., is free from any material which can produce corrosion of the metal work of machinery. It is indeed calculated to protect metallic surfaces from oxidation.

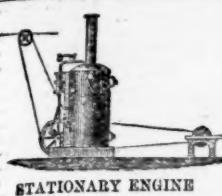
The lubricating power of this oil is equal to Sperm or Lard Oil.

T. W. KEATES, F.C.S., &c. &c.

Every parcel of the Oil sent from the work bears the Trade Mark of the Firm.

LONDON, CASTLE RAYNARD, UPPER THAMES STREET.





STATIONARY ENGINE

CHAPLIN'S PATENT STEAM ENGINES & BOILERS

(PRIZE MEDAL, INTERNATIONAL EXHIBITION, 1862).

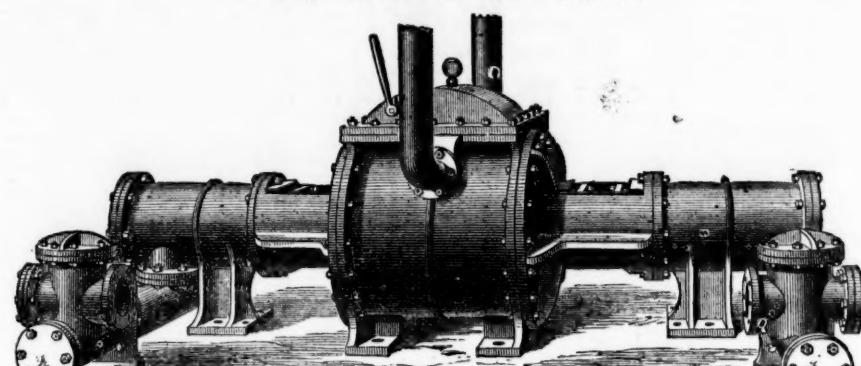
The ORIGINAL combined Vertical Engines and Boilers, introduced by Mr. CHAPLIN in 1855. Each class kept in Stock for Sale or Hire.



STEAM CRANE.

WIMSHURST & CO., ENGINEERS,

OFFICES: 117, CANNON STREET, E.C. WORKS: REGENTS PLACE, COMMERCIAL ROAD EAST, LONDON, E.

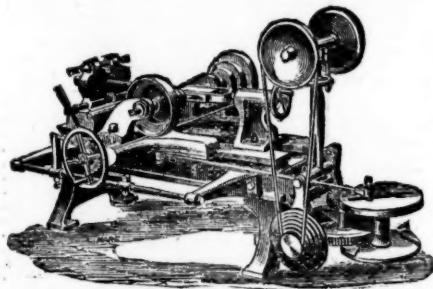
HAYWARD TYLER AND CO.'S
PATENT STEAM PUMPING MACHINERY
FOR DEEP MINES.

The Machine erected in South Wales (at the Broad Oak Colliery, Loughor, near Llanelli), has a steam cylinder 40 inches diameter and two plungers of 8 inches diameter, and is raising 15,000 gallons of water per hour, the steam-boiler being on the surface. This it does with the greatest ease, the pump-valves working with scarcely any perceptible sound. The length of the incline besides the vertical lift is at present about 250 yards. The pump is constructed to be moved down the working as it advances, and is calculated to force the water to a height of 700 feet through a horizontal distance of 490 yards. For full description see *Mining Journal*, *Colliery Guardian*, *Engineering*, &c.

Sole Makers, HAYWARD TYLER & CO., Hydraulic Engineers,
84 and 85, UPPER WHITECROSS STREET, LONDON, E.C.

TITANIC STEEL AND IRON COMPANY LIMITED
SOLE MANUFACTURERS OFMUSHET'S TITANIC BORER STEEL,
AND

Mushet's Titanic Cast Steel for Engineer's Tools, &c.

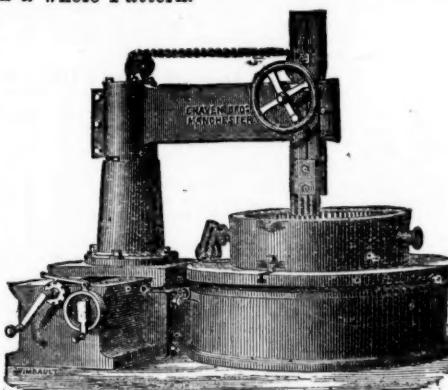
FOREST STEEL WORKS, COLEFORD,
GLOUCESTERSHIRE.Patent Duplex Cotter-Hole and
Key-Bed DRILLING MACHINE.

The advantage of this Machine is, that the Drills are only requisite to be half the length of the Cotter-hole required to be cut, as they operate simultaneously from both sides of the object, meeting accurately in the middle, and doing the work in less than half the usual time, besides producing a smooth hole on account of short, stiff Drills being used, thus producing a much better class of work, hitherto unattainable by the Machines with one long Drill.

The Machine is made in three sizes, and often made with double set of Head Stocks, to drill both ends of a connecting rod at the same time.

Improved WHEEL-MOULDING
MACHINE.

This Machine will Mould the Teeth of Bevel, Spur, and Worm Wheels, also Straight Racks, of any Pitch with a whole Pattern.



Some of the many advantages in the use of this Machine are, that the teeth of Wheels are perfectly straight across the Tooth, no tapes being required to draw the pattern; the Wheels are true in diameter, not depending upon a wood model, which sometimes alters in shape; Wheels of any pitch and form of teeth can be moulded without the use of a whole expensive pattern; and wheels to work into each other can be made mathematically correct in form, at the small cost of segment patterns.

The Machine is made in various sizes to mould wheels of any diameter.

CAVEN BROTHERS,
MAKERS OF EVERY DESCRIPTION OF MACHINE TOOLS,
Vauxhall Ironworks, Osborne Street, Manchester.

PATENT
SELF-LUBRICATIVE STEAM & HYDRAULIC ENGINE PACKING.

This Packing is invaluable to all Users of Steam-Power; it supersedes anything of the kind ever invented; it is now in use in all the Chief Railways and First Firms in this Country and Abroad, and is

THE ONLY PACKING THAT WORKS WITHOUT OIL OR GREASE,

Does not char, is pliable, keeps the rods

COOL, BRIGHT, AND CLEAN,

And lasts longer than any other, thereby

SAVING FULLY 200 PER CENT.

To the User, in oil, labour, and material.

Can be had only from the Agents throughout the country, appointed by

THE SOLE LICENSEES,

HENRY HOUSE AND CO.,

CATHERINE STREET, CITY ROAD, LONDON, E.C.

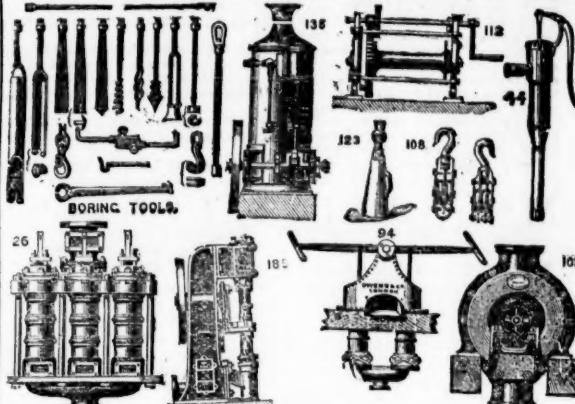
Where also may be obtained, the LUBRICATIVE PACKING COMPANY'S

ANTI-FRICTION CREAM OIL,

Which Lubricates perfectly, keeps the Bearings Cool, and does not become Viscid or Glutinous.



S. OWENS AND CO.

Hydraulic and General Engineers,
WHITEFRIARS STREET, FLEET STREET, LONDON.

MANUFACTURERS OF

BORING TOOLS, for testing ground for Minerals, Bridge Foundations, Artesian Wells, &c., to any depth.

No. 26.—Treble Barrel and other Deep Well Pumps.

No. 136.—Vertical and other Portable Steam-engines.

No. 185.—Horizontal and Vertical Steam Pumping-engines.

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No. 108.—Pulley Blocks of all sizes.

No. 123.—Bottle and other Lifting Jacks.

No. 94.—Double-barrel Pumps, for Mine or Quarry use.

No. 44.—Portable Wrought-iron Pumps, ditto ditto.

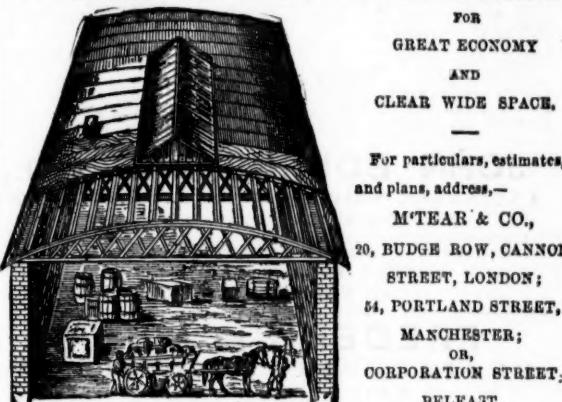
No. 102.—Bernays's Patent Centrifugal Pumps, of all sizes.

ALSO EVERY OTHER DESCRIPTION OF

HYDRAULIC AND GENERAL MACHINERY,

COMPRISING
TURINES, WATER WHEELS, WIND ENGINES,
THE HYDRAULIC RAM, FIRE ENGINES, &c.

Catalogues and Estimates on application.

M'TEAR AND CO.'S CIRCULAR FELT ROOFING
FOR
GREAT ECONOMY
AND
CLEAR WIDE SPACE.For particulars, estimates,
and plans, address,—M'TEAR & CO.,
20, BUDGE ROW, CANNON
STREET, LONDON;
54, PORTLAND STREET,
MANCHESTER;
OR,
CORPORATION STREET,
BELFAST.

The above drawing shows the construction of this cheap and handsome roof, now much used for covering factories, stores, sheds, farm buildings, &c., the principals of which are double bow and string girders of best pine timber, sheathed with $\frac{1}{2}$ in. boards, supported on the girders by purlins running longitudinally, the whole being covered with patent waterproof roofing felt. These roofs so combine lightness with strength that they can be constructed up to 100 ft. span without centre supports, thus not only affording a clear wide space, but effecting a great saving both in the cost of roof and uprights.

They can be made with or without top-lights, ventilators, &c. Felt roofs of any description executed in accordance with plans. Prices for plain roofs from 30s. to 60s. per square, according to span, size, and situation.

Manufacturers of PATENT FELTED SHEATHING, for covering ships' bottoms under copper or zinc.

INODOROUS FELT for lining damp walls and under floor cloths.

DRY HAIR FELT, for deadening sound and for covering steam pipes, thereby saving 25 per cent. in fuel by preventing the radiation of heat.

PATENT ASPHALTE ROOFING FELT, price 1d. per square foot.

Wholesale buyers and exporters allowed liberal discounts.

PATENT ROOFING VARNISH, in boxes from 3 gallons to any quantity required, 8d. per gallon.



By a special method of preparation, this leather is made solid, perfectly close in texture, and impermeable to water; it has, therefore, all the qualifications essential for pump buckets, and is the most durable material of which they can be made. It may be had of all dealers in leather, and of

I. AND T. HEPBURN AND SONS,
TANNERS AND CURRERS, LEATHER MILLBAND AND HOSE PIPE
MANUFACTURERS,

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THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER,
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North
Shields; 195, High-street, Sunderland.

THE IRON AND COAL TRADES' REVIEW:
ROYAL EXCHANGE, MIDDLESBROUGH.
The IRON AND COAL TRADES' REVIEW is extensively circulated amongst the iron Producers, Manufacturers, and Consumers, Coalowners, &c., in all the iron and coal districts. It is, therefore, one of the leading organs for advertising every description of Iron Manufactures, Machinery, New Inventions, and all matters relating to the Iron, Coal, Hardware, Engineering, and Metal Trades in general.

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SPECIAL PAMPHLET ON NERVOUS DEBILITY.—Read the Warning Notice on the Special Treatment of Nervous, Mental, and Physical Debility, Loss of Spirits, Dimness of Sight, Indigestion, &c. Illustrated with cases. Gives rules for cure by the New Medicines. Dr. SMITH will, for the benefit of country patients, on receiving a description of their case, send a letter of advice GRATIS. Pamphlet (160 pages) free by post in an envelope on receipt of two stamps.—Dr. SMITH, 8, Burton Crescent, London, W.C.

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Undertakes the PROMPT EXECUTION of all ORDERS for the PURCHASE of BRAZILIAN PRODUCE, and the PURCHASE of GOODS in all European markets.

The sale in Brazil, South America, England, India, and Spain of all consignments of produce, goods, earthenware, machinery, railway and telegraph plant, galvanized ironwork, agricultural implements of all kinds, cement, coals, &c.

Furnishes information and assistance to all those desirous of emigrating to Brazil, and contracts for the settlement of emigrants in any part of the Empire.

Has several landed estates in Brazil to dispose of, suitable for capitalists and emigrants.

The Agency also undertakes the collection of bills payable at any part of the Empire—realisation and adjustment of all claims.

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J. DE A. PORTUGAL, Manager.

DICKER'S AUSTRALIAN AND LONDON MINING AND GENERAL AGENCY,
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Established in 1868.

The fullest and reliable information relative to Australian Gold Mine Investments can always be obtained from the undersigned.

THOMAS DICKER,
(Late Editor of the "Mining Record," Melbourne).

MESSRS. LISCOMBE AND CO.,
39, SOUTH CASTLE STREET, LIVERPOOL.

Beg to inform their CLIENTS and the PUBLIC that they are PREPARED to do BUSINESS in ALL CLASSES of MINING SHARES—English, Foreign, and Colonial—at the closest market prices.

A Mining Engineer of great experience having recently joined the firm, they are in a position to make thorough inspections and surveys, and give first-class reports upon all metalliferous mines throughout the world. They are also ready to provide capital to any moderate extent for working bona fide mineral properties, no matter where situated.

Messrs. LISCOMBE and CO. have for sale at this present time shares in several most highly promising progressive mines, which are certain shortly to pay large dividends upon a very small outlay.

Full particulars will be forwarded on application to bona fide investors.

MR. R. PERCY ROBERTS,
FINANCIAL AGENT,
60, ENGLISH STREET, CARLISLE.MESSRS. CAMERON AND CO., SHAREBROKERS,
CHESTER, having a thorough knowledge of the Lead Mining Districts
in Wales, are ENABLED to FURNISH the BEST and MOST RELIABLE
INFORMATION on all WELSH LEAD MINES.

Messrs. CAMERON and CO. invite subscriptions for a limited number of fully-paid shares, at £2 each, in a sound MINING PROPERTY, which is certain to pay large dividends at an early date. Full particulars forwarded on application. Business transacted in American Gold and Silver Mines, also in Roman Gravels, Tankerville, Boz, Pennerley, and Perkins Beach.

WANTED, a good HEMATITE IRON MINE. Cumberland district preferred.

Also, an IRON MANGANESE SETT. State price and particulars.

OFFICES: BRIDGE STREET CHAMBERS, CHESTER.

M. R. J. S. MERRRY,
ASSAYER AND ANALYTICAL CHEMIST,
SWANSEA.CAPTAIN ABSALOM FRANCIS,
GOGINAN, ABERYSTWITH,
MINING AGENT, ENGINEER, AND SURVEYOR.

The great success which is attending the opening and working of the Mines in the counties of Cardigan and Montgomery, and the many properties placed at the disposal of Capt. ABSALOM FRANCIS, induces him to offer his services, either to ADVISE, INSPECT, REPORT, or SURVEY, for Mining Companies or private shareholders.

For terms, apply to Capt. ABSALOM FRANCIS, as above.

BICKFORD'S PATENT
FOR CONVEYING
FIRE TO THE
CHARGE IN
BLASTING ROCKS, &c.

Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXPOSITION" of 1862, in London; at the "IMPERIAL EXPOSITION" held in Paris, in 1855; at the "INTERNATIONAL EXPOSITION" in Dublin, 1866; at the "UNIVERSAL EXPOSITION" in Paris, 1867; and at the "GREAT INDUSTRIAL EXHIBITION," at Altona, in 1869.

BICKFORD, SMITH AND CO.,
of TUCKINGMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—
EVERY COIL of FUSE MANUFACTURED BY them has TWO SEPARATE THREADS PASSING THROUGH THE COLUMN of GUNPOWDER, and BICKFORD, SMITH AND CO. CLAIM SUCH TWO SEPARATE THREADS AS THEIR TRADE MARK.

JOHN BOURNE AND CO.,
ENGINEERS, SHIPBUILDERS, AND CONTRACTORS,
BLOWING ENGINES, WINDING ENGINES,
Bourne's Patent Spherical Governors, Bourne's Patent Feedwater Heaters,
Bourne's Patent Gas Furnaces, Bourne's Patent Coal-dust Furnaces,
PUMPING ENGINES, STEAM BOILERS.
66, MARK LANE, LONDON.

FREDERICK MIRLS,
ENGINEERING AUCTIONEER,
VALUER AND SURVEYOR,
17, ST. ANN'S SQUARE, MANCHESTER.

WHEATLEY KIRK & PRICE,
(ESTABLISHED 1850),
AUCTIONEERS AND VALUERS
OF EVERY DESCRIPTION OF
COLLIERY PLANT, IRONWORKS, &c.

Estimates for Periodical Surplus Sales, Annual Valuations, &c.

35, PRINCESS STREET, MANCHESTER.

ALEXANDER SMITH,
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OF EVERY DESCRIPTION OF PLANT AND MACHINERY.
CASTLE STREET AND BOURNE STREET, DUDLEY.
Office for all New and Second-Hand Requirements of Ironworks, Collieries, and General Manufactories.

IRON AND COAL COMPANIES.

Shares, Company.	Paid.	Price.
\$100 John Abbot and Co. [L.]	£5 0 0 ..	22½ 20 dls.
100 Ashbury Co. [L.]	90 0 0 ..	35 30 dls.
50 Blaenavon Iron and Steel Co. [L.]	7 10 0 ..	
100 Bolckow, Vaughan, and Co. [L.]	30 0 0 ..	29 30 pm.
100 Brown, John, and Co. [L.]	70 0 0 ..	8½ 9½ pm.
10 Consett Iron Co. [L.]	7 10 0 ..	6 6½ pm.
100 Cambell and Co. [L.]	80 0 0 ..	10 10 dls.
32 Ebbw Vale Co. [L.]	27 10 0 ..	5 5½ dls.
6 Fairbairn Engineering	5 0 0 ..	1½ 1 pm.
20 General Mining Association [L.]	20 0 0 ..	8 10 pm.
15 Hopkins, Gilkes, and Co. [L.]	10 0 0 ..	¾ 12 pm.
10 Ironmasters' Company [L.]	10 0 0 ..	
10 Midland Iron Co. [L.]	5 0 0 ..	6 7½ pm.
2½ Mwyndy Iron Co. [L.]	11 10 0 ..	75 73½ dls.
100 Nantyglo and Blaenau (perp. 8 p. c. pref.)	25 0 0 ..	¾ 12½ 14 pm.
1 Nerbunda Coal and Iron	0 7 0 ..	par. ¾ pm.
35 Palmer's Shipbuilding and Iron Co. [L.]	25 0 0 ..	1 2 pm.
35 Ditto	25 0 0 ..	1 2 pm.
100 Parkgate Iron Co. [L.]	65 0 0 ..	16 pm. par.
20 Patent Shaft and Axletree Co. [L.]	10 0 0 ..	6½ 6¾ pm.
50 Rhymney Iron Co. [L.]	60 0 0 ..	17 15 dls.
15 Ditto New	15 0 0 ..	5 4½ dls.
80 Shotts Iron Co.	50 0 0 ..	20 19 dls.
100 Sheepbridge Iron and Coal Co. [L.]	55 0 0 ..	4½ 4 dls.
100 S. Aveyly Iron and Coal Co.	60 0 0 ..	49 51 pm.
100 Ditto ditto New	10 0 0 ..	8 9 pm.
100 Thames Iron Company	10 0 0 ..	9 11 pm.
7½ Titanite Iron and Steel	5 0 0 ..	par. 1 pm.
10 Van Iron Ore [L.]	10 0 0 ..	
100 Vancouver Coal [L.]	4 0 0 ..	
100 Witton Coal and Iron Co.	100 0 0 ..	12 10 dls.
100 Ditto ditto	75 0 0 ..	12 10 dls.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares. Mines. Paid. Last Pr. Bus. done. Total divs. Per share. Last paid.

1500 Alderley Edge, c. Cheshire* .. 10 0 0 .. — .. 10 11 8.. 0 0 .. July 1871

2000 Blaen Caclan, s-l. Cardig.* .. 1 0 0 .. 13½ .. 0 1 0.. 0 1 .. May 1871

6000 Boscastle, t. c. St. Just .. 1 0 0 .. — .. 0 2 0.. 0 2 .. Apr. 1870

200 Botallack, t. c. St. Just .. 91 5 0 .. 250 .. 250 260 .. 601 5 0.. 6 0 .. Aug. 1871

5000 L. Bronfloyd, s-l. Cardigan* .. 100 0 0 .. 110 .. 105 .. 106 0 0.. 2 0 .. July 1871

100 Brookwood, c. Buckfastleigh .. 1 16 0 .. — .. 1 0 0.. 0 2 .. July 1871

9000 Bwlch Consols, s-l. Cardigan* .. 4 0 0 .. — .. 0 0 0.. 0 2 .. June 1869

6400 Cashwell, t. c. L. Cumbri.* .. 2 10 0 .. — .. 0 15 0.. 0 3 6 .. Sep. 1871

5000 Castle-an-Dinas, t. St. Columb.* .. 2 0 0 .. — .. 0 2 0.. 0 2 .. July 1871

12000 Cawdor, s-l. Newlyn .. 16 5 7 .. — .. 2½ 25 .. 16 15 0.. 0 19 .. Aug. 1869

1000 Carn Brae, c. Illogan .. 35 0 0 .. 145 .. 140 145 .. 252 10 0.. 2 0 .. Aug. 1871

2450 Cook's Kitchen, c. Illogan .. 19 14 9 .. 23 .. 30 32 .. 6 17 0.. 0 15 .. July 1871

867 Cwm Erynn, t. Cardiganshire* .. 7 10 0 .. — .. 31 18 0.. 0 5 .. Jan. 1871

128 Cymwystre, t. L. Cardiganshire .. 60 0 0 .. — .. 294 10 0.. 0 2 .. July 1869

280 Derwent, s-l. Durham .. 300 0 0 .. — .. 177 10 0.. 0 2 10 .. July 1868

1024 Devon Gr. Consols, c. Tavistock .. 1 0 0 .. 100 .. 115 0 .. 0 4 .. 0 .. May 1870

556 Ding Dong, t. Gwylfa* .. 49 14 8 .. 185 .. 180 185 .. 7 10 0.. 0 15 .. Aug. 1870

1432 Dolcoath, c. t. Camborne .. 32 4 5 .. 1 .. 3½ 1 .. 1 3 3.. 0 1 .. July 1870

6142 Dracote Wallis, t. Caistock* .. 2 10 0 .. — .. 1 3 3.. 0 1 .. July 1870

6144 East Cadron, t. St. Cleer .. 2 14 8 .. 5½ .. 4½ 5 .. 14 16 0.. 0 2 6 .. July 1871

300 East Darren, t. L. Cardiganshire .. 32 0 0 .. — .. 197 10 0.. 0 2 .. April 1871

6400 East Pool, t. c. Pool, Illogan .. 6 9 9 .. 13½ .. 13 13' .. 11 16 2.. 0 5 .. July 1871

1904 East Wheal Lovell, t. Wendron .. 3 9 0 .. 13 .. 11 13 .. 19 8 2.. 0 12 .. Aug. 1871

2500 Foxdale, t. L. Cardiganshire .. 25 0 0 .. — .. 78 10 0.. 0 10 .. June 1871

2000 Frank Mills, t. Christow .. 3 18 6 .. — .. 4 8 0.. 0 2 .. Aug. 1870

3550 Gawton, c. Tavistock .. 3 10 6 .. — .. 0 3 0.. 0 3 .. Jan. 1868

15000 Great Lazey, t. Isle of Man* .. 4 0 0 .. 17 .. 16½ 17½ .. 14 3 0.. 0 6 .. June 1871

5508 Great Wheal Vor, t. c. Helston .. 40 0 0 .. 10 .. 9½ 10 .. 15 12 0.. 0 3 .. June 1871

10240 Herodsfoot, t. L. Lizardhead .. 4 19 0 .. — .. 0 2 0.. 0 1 .. Nov. 1870

8 10 0 .. 45 .. 42 44 .. 57 0 .. 0 10 .. June 1871

5500 Killaloe, s-l. Tipperary .. 1 0 0 .. 1½ .. 1½ .. 0 2 11½ 0 .. 0 9 .. Dec. 1868

12000 L. Lizardhead, t. L. Lizardhead .. 10 12 0 .. 15 .. 14 15 .. 3 5 0.. 0 15 .. Aug. 1871

6510 North Levant, t. c. St. Just .. 3 11 3 .. 2 .. 1½ 2½ .. 0 5 0.. 0 1 .. June 1871

400 Lisburne, t. L. Cardiganshire .. 18 15 0 .. — .. 2 0 .. 0 2 .. Mar. 1871

9000 Marke Valley, c. Caradon .. 4 10 6 .. 5½ .. 5½ 6 .. 7 2 .. 0 4 .. July 1871

18000 Minera Mining Co. L. Wrexham* .. 25 0 0 .. — .. 293 18 3.. 4 15 0.. 0 8 .. Aug. 1871

20000 Mining Co. of Ireland, c. L. cl.* .. 7 0 0 .. 6½ .. 6 6½ .. 0 4 6 .. 0 2 .. July 1870

6400 New Pembroke, t. c. Par Station .. 5 0 0 .. — .. 0 7 6.. 2 6 .. Mar. 1871

20000 North Levant, t. c. St. Just .. 10 12 0 .. 15 .. 14 15 .. 3 5 0.. 0 15 .. Aug. 1871

6510 North Wheal Croft, c. Illogan .. 3 11 3 .. 2 .. 1½ 2½ .. 0 5 0.. 0 1 .. June 1871

2556 Pendarves United, t. c. Camborne .. 66 0 0 .. 52 .. 50 52½ .. 21 0 .. 0 3 .. July 1871

5000 Penhalls, t. St. Cleer .. 3 0 0 .. 6 .. 5½ 6 .. 1 16 0.. 0 4 .. Aug. 1871

5000 Phoenix, t. c. Linkinhorne .. 50 0 0 .. — .. 470 10 0.. 0 7 .. June 1871

1772 Polherio, t. St. Agnes .. 15 0 0 .. — .. 0 17 6.. 0 10 .. May 1871

2000 Poldice, t. St. Agnes .. 10 0 0 .. — .. 1 16 0.. 0 10 .. Oct. 1870

12800 Prince of Wales, c. Calstock .. 10 12 6 .. 27 .. 24 26 .. 0 10 0.. 0 1 .. Nov. 1869

11200 Providence, t. U. L. Lizardhead .. 10 6 7 .. — .. 102 2 6.. 0 10 .. June 1871

15000 Queen, s. c. Calstock .. 0 0 0 .. — .. 0 2 0.. 0 1 .. Dec. 1870

5569 Rosewall Hill and Ransom, t. .. 4 0 0 .. — .. 0 14 6.. 0 1 .. June 1871